



Machine Id  
**8271**  
Component  
**Natural Gas Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120074</b>	GFL0097004	GFL0042075
Sample Date		Client Info		<b>29 May 2024</b>	05 Oct 2023	10 Feb 2022
Machine Age	kms	Client Info		<b>166704</b>	162259	48249
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>15</b>	10	30
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>1</b>	1	3
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	3
Copper	ppm	ASTM D5185(m)	>35	<b>3</b>	9	12
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

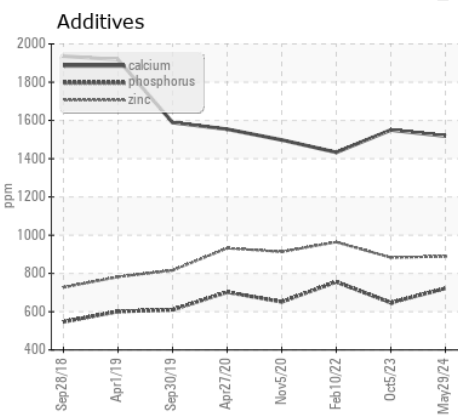
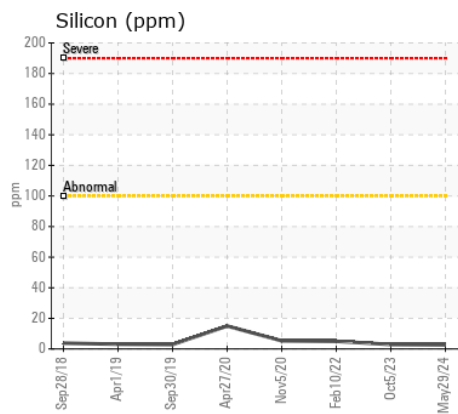
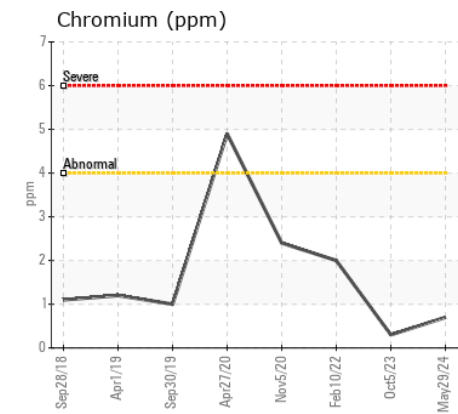
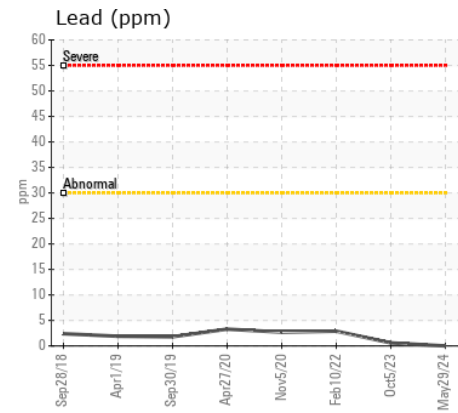
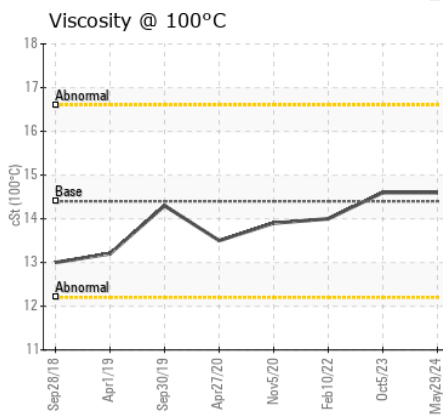
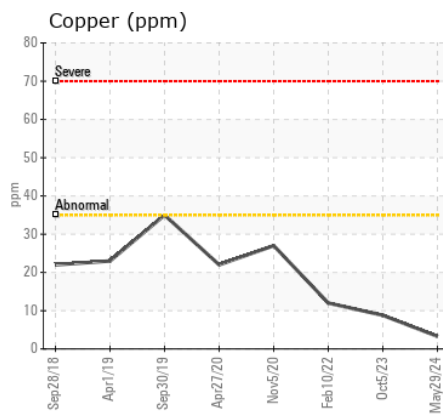
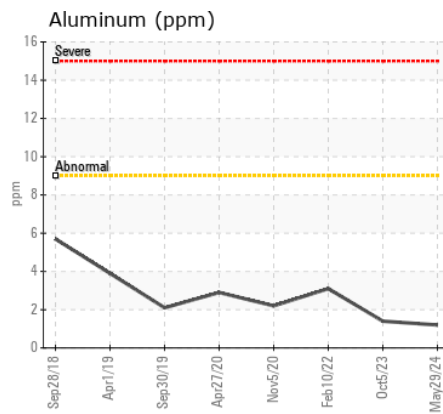
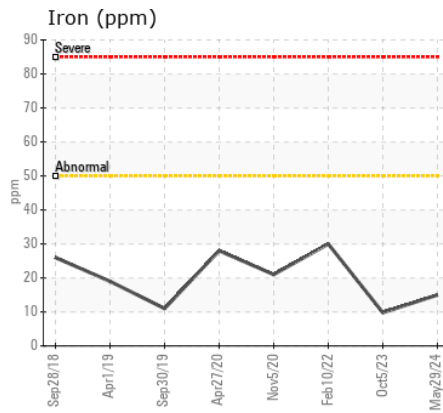
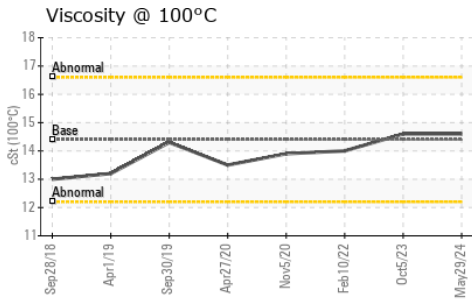
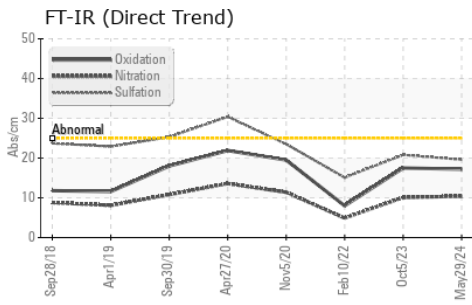
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>3</b>	3	5
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.4</b>	10.1	4.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.6</b>	20.8	15.1
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>158	<b>7</b>	8	11
Boron	ppm	ASTM D5185(m)	250	<b>16</b>	8	5
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>49</b>	51	54
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>573</b>	530	641
Calcium	ppm	ASTM D5185(m)	3000	<b>1518</b>	1550	1433
Phosphorus	ppm	ASTM D5185(m)	1150	<b>722</b>	647	756
Zinc	ppm	ASTM D5185(m)	1350	<b>889</b>	883	964
Sulfur	ppm	ASTM D5185(m)	4250	<b>1964</b>	1931	1988
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.2</b>	17.5	8.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.6</b>	14.6	14.0



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0120074  
**Lab Number** : 02639326  
**Unique Number** : 5788488  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**GFL Environmental - 225 - COT(D2)**  
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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.