



Machine Id  
**933012**  
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>GFL0119227</b>	GFL0102927	GFL0087028
Sample Date		Client Info		<b>04 Jun 2024</b>	08 Jan 2024	27 Jul 2023
Machine Age	hrs	Client Info		<b>4723</b>	3548	2344
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	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>21</b>	24	25
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	2	2
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	2	<1
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>8</b>	11	7
Lead	ppm	ASTM D5185(m)	>40	<b>11</b>	10	4
Copper	ppm	ASTM D5185(m)	>150	<b>2</b>	3	3
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	2	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

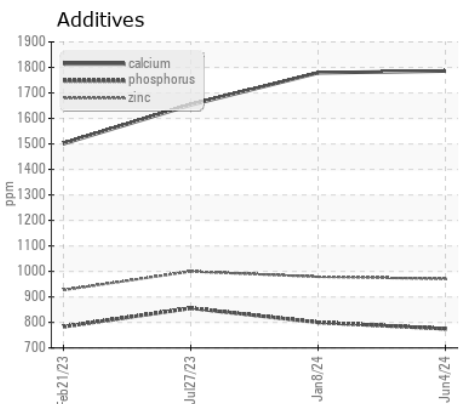
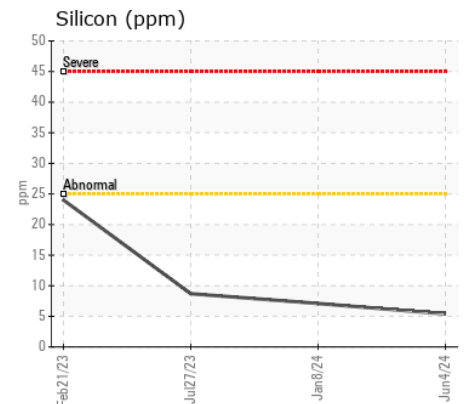
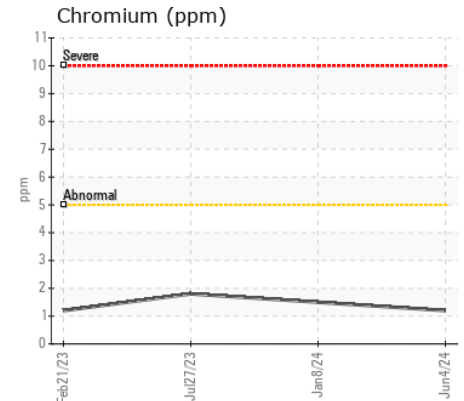
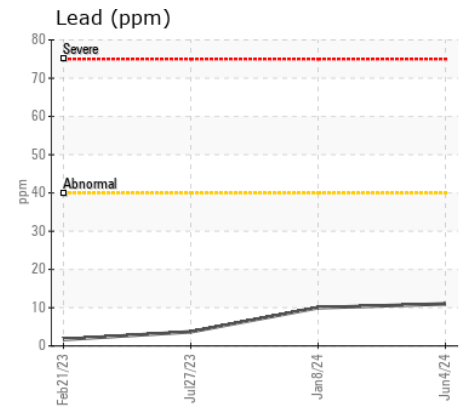
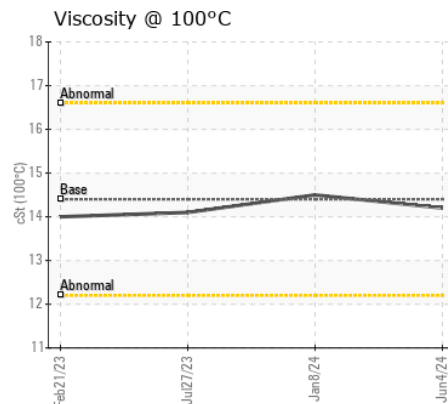
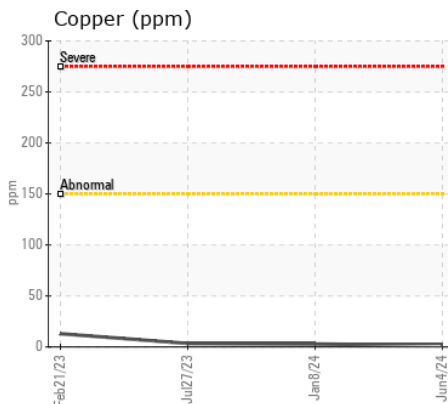
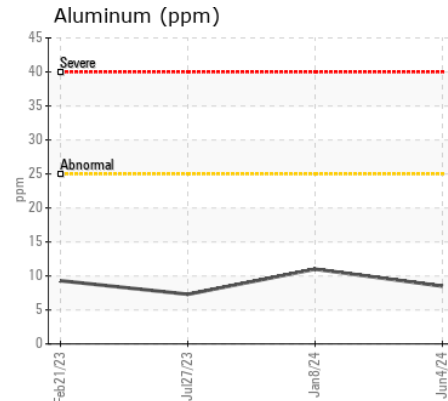
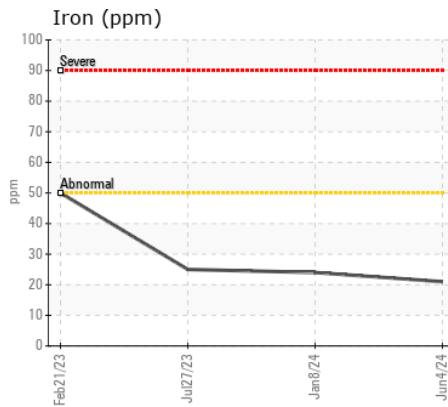
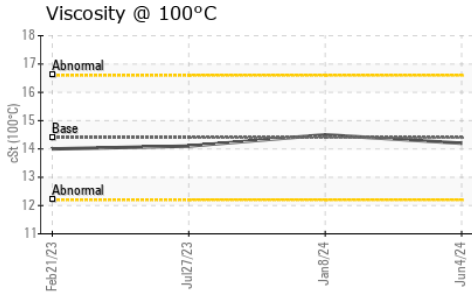
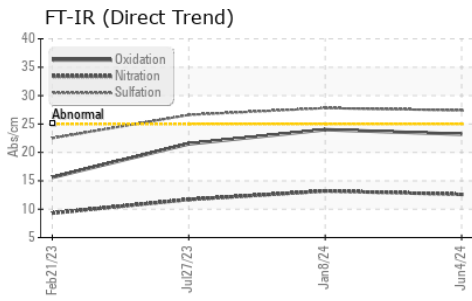
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	7	9
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	5	5
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>12.6</b>	13.2	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>27.4</b>	27.8	26.6
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>10</b>	11	10
Boron	ppm	ASTM D5185(m)	250	<b>7</b>	8	6
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	<b>59</b>	57	57
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185(m)	450	<b>632</b>	614	671
Calcium	ppm	ASTM D5185(m)	3000	<b>1786</b>	1779	1653
Phosphorus	ppm	ASTM D5185(m)	1150	<b>775</b>	800	856
Zinc	ppm	ASTM D5185(m)	1350	<b>971</b>	979	1000
Sulfur	ppm	ASTM D5185(m)	4250	<b>2048</b>	2131	2046
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>23.2</b>	24.0	21.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>14.2</b>	14.5	14.1



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0119227  
**Lab Number** : 02640442  
**Unique Number** : 5789604  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**GFL Environmental - 253 - TOR APT**  
 15 Bermondsey Road - Building B  
 Toronto, ON  
 CA M4B 1Y9  
 Contact: Natalia Stalynska  
 nstalynska@gflenv.com

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.