



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

[Gfl0110922]

Machine Id

213014

Component

Diesel Engine

Fluid

AC DELCO 10W30 MOTOR OIL (--- GAL)

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110922</b>	GFL0110946	---
Sample Date		Client Info		<b>28 May 2024</b>	25 Apr 2024	---
Machine Age	hrs	Client Info		<b>2368</b>	2229	---
Oil Age	hrs	Client Info		<b>1868</b>	500	---
Filter Age	hrs	Client Info		<b>1868</b>	500	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>19</b>	10	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>2</b>	4	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

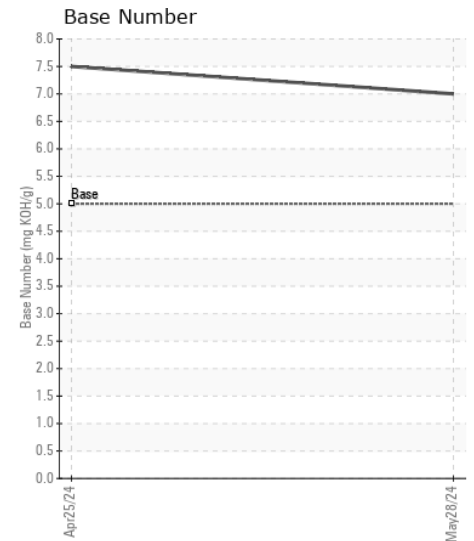
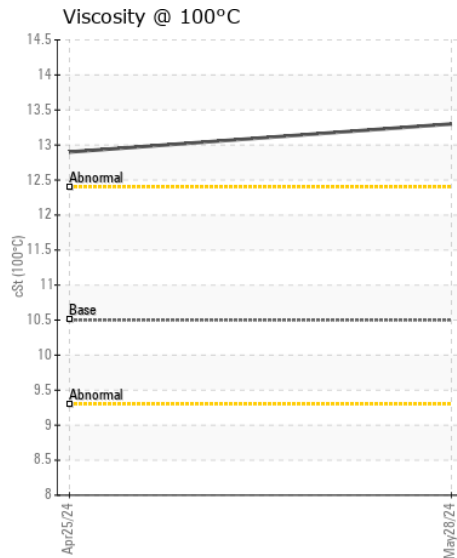
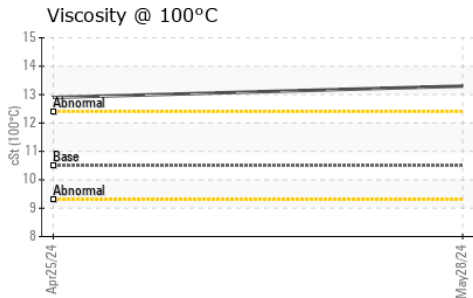
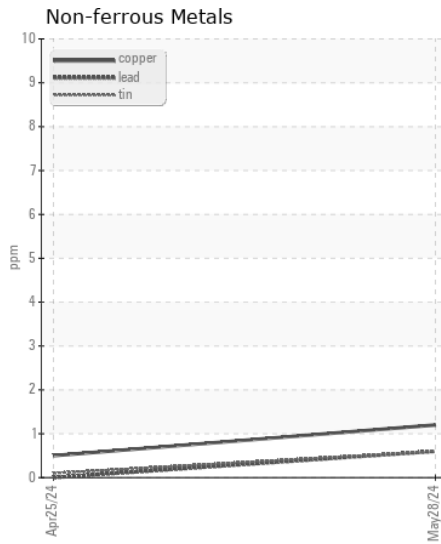
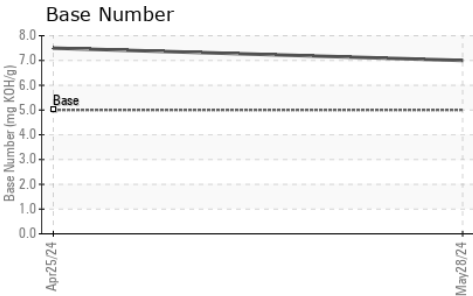
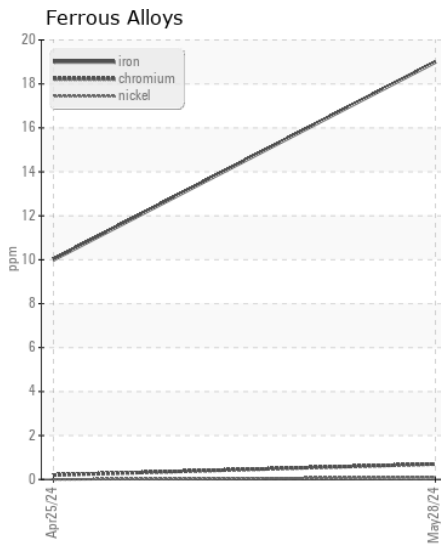
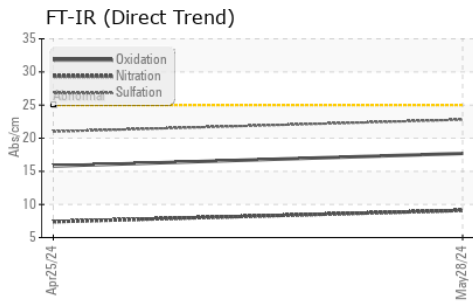
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	5	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.8</b>	21.0	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	1	---
Boron	ppm	ASTM D5185m		<b>417</b>	302	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>83</b>	71	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>436</b>	493	---
Calcium	ppm	ASTM D5185m		<b>1408</b>	1448	---
Phosphorus	ppm	ASTM D5185m		<b>1080</b>	942	---
Zinc	ppm	ASTM D5185m		<b>1200</b>	1108	---
Sulfur	ppm	ASTM D5185m		<b>3493</b>	3700	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.7</b>	15.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	5.0	<b>7.0</b>	7.5	---
Visc @ 100°C	cSt	ASTM D445	10.5	<b>13.3</b>	12.9	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110922  
**Lab Number** : 06196314  
**Unique Number** : 11058437  
**Test Package** : FLEET

**GFL Environmental - 629 - Northern A1**  
 3947 US 131 N  
 Kalkaska, MI  
 US 49646-8428  
 Contact: MITCH HERSHBERGER

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (231)624-0848

F: