



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

Area  
**(EMN864)**  
Machine Id  
**AUTOCAR 10854**  
Component  
**Front Diesel Engine**  
Fluid  
**{not provided} (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109099</b>	GFL0109061	---
Sample Date		Client Info		<b>11 Jan 2024</b>	05 Jan 2024	---
Machine Age	hrs	Client Info		<b>4005</b>	3953	---
Oil Age	hrs	Client Info		<b>4005</b>	3953	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>9</b>	16	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>330	<b>5</b>	1	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

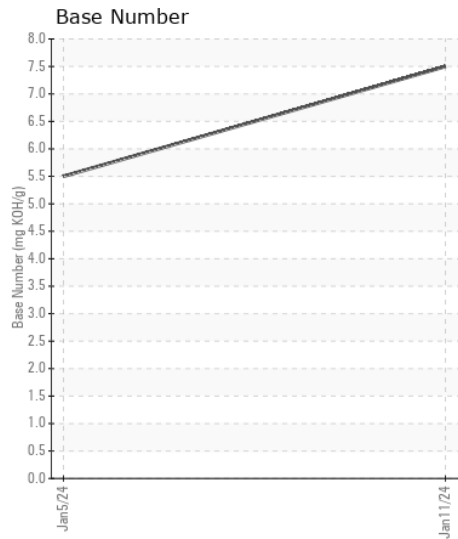
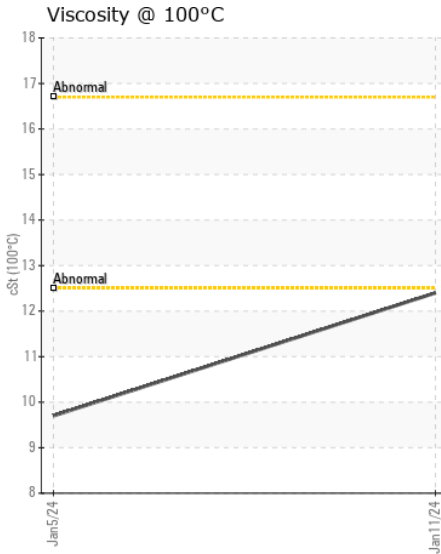
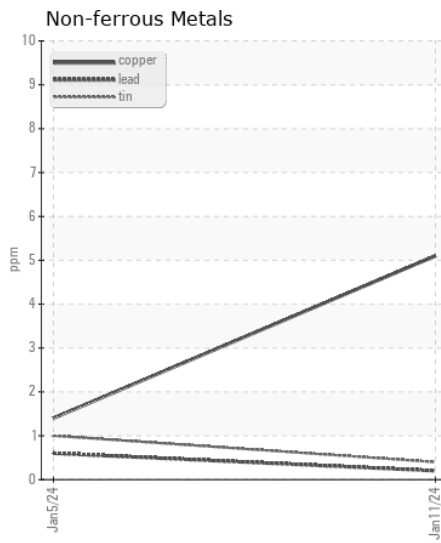
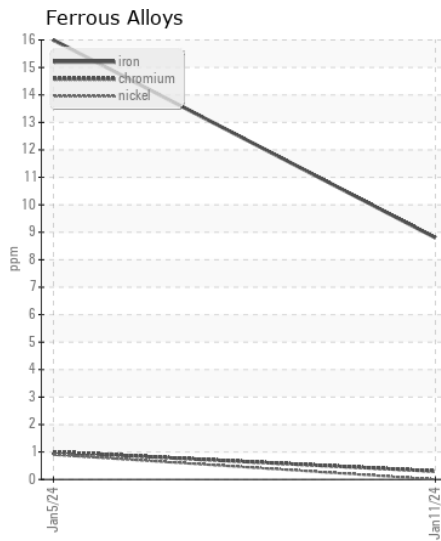
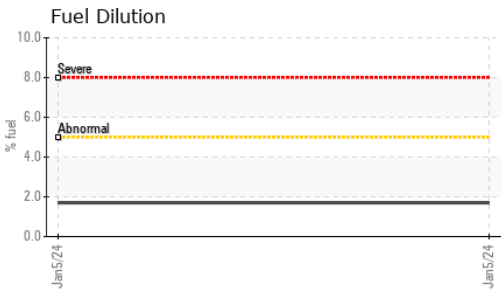
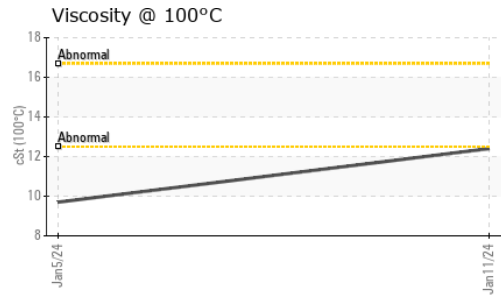
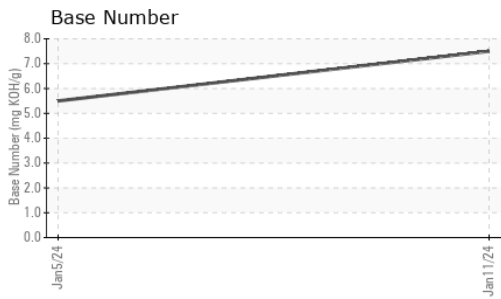
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	1.7	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.6</b>	9.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.6</b>	19.4	---
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>6</b>	1	---
Boron	ppm	ASTM D5185m		<b>19</b>	11	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>59</b>	53	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>743</b>	604	---
Calcium	ppm	ASTM D5185m		<b>1069</b>	1000	---
Phosphorus	ppm	ASTM D5185m		<b>960</b>	696	---
Zinc	ppm	ASTM D5185m		<b>1123</b>	942	---
Sulfur	ppm	ASTM D5185m		<b>2795</b>	2422	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.2</b>	15.9	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.5</b>	5.5	---
Visc @ 100°C	cSt	ASTM D445		<b>12.4</b>	9.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109099 **Received** : 16 Jan 2024  
**Lab Number** : 06060735 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832117 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution )

**GFL Environmental - 009 - Fairburn**  
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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)