



Machine Id  
**269**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

**RECOMMENDATION**

We advise that you check the fuel injection system. We advise that you check for faulty combustion, plugged air filters, or aftercoolers. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. NOTE: High solids (carbon/soot) in the sample have limited the accuracy of Infra-Red data including Total Base Number (TBN) value.

**WEAR**

All component wear rates are normal.

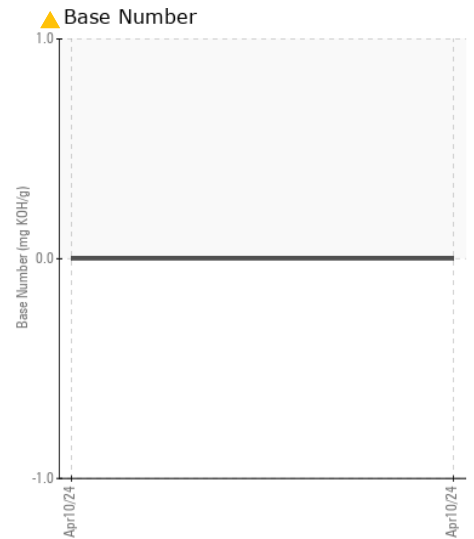
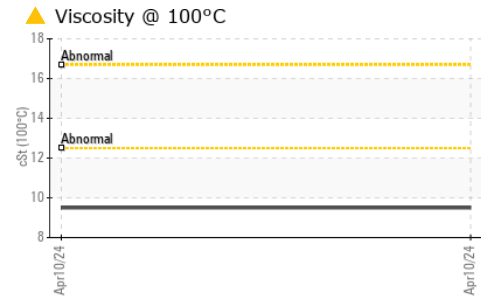
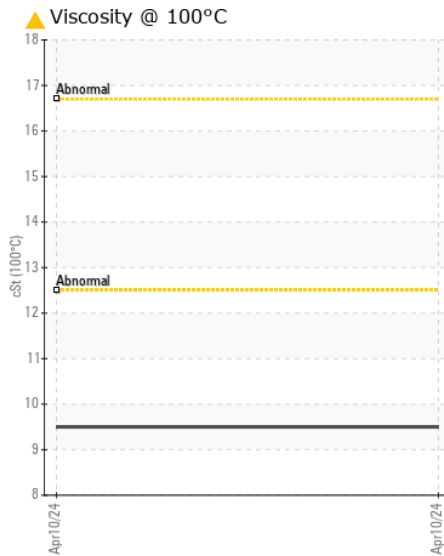
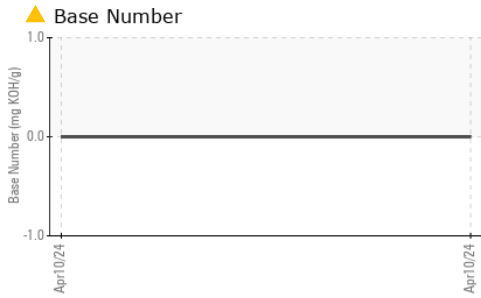
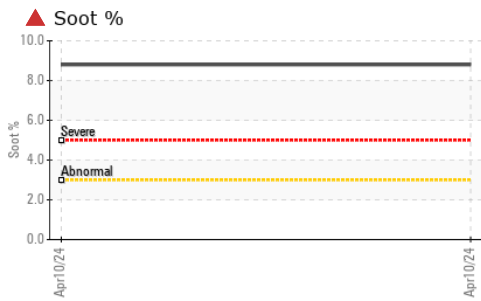
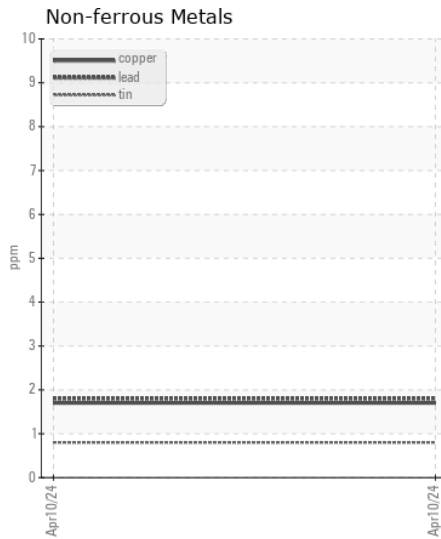
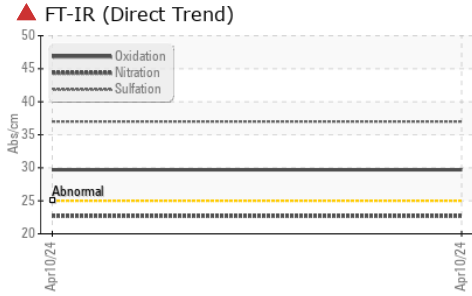
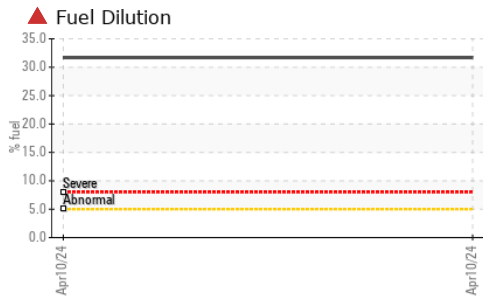
**CONTAMINATION**

There is a high amount of fuel present in the oil. There is an abnormal amount of solids and carbon present in the oil.

**FLUID CONDITION**

Fuel is present in the oil and is lowering the viscosity. The BN level is low. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0110403</b>	---	---
Sample Date		Client Info		<b>10 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---
Iron	ppm	ASTM D5185m	>100	<b>55</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Fuel	%	ASTM D3524	>5	<b>▲ 31.7</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>▲ 8.8</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>22.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>37.0</b>	---	---
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>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---
Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Boron	ppm	ASTM D5185m		<b>4</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>36</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>593</b>	---	---
Calcium	ppm	ASTM D5185m		<b>673</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>643</b>	---	---
Zinc	ppm	ASTM D5185m		<b>769</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>2240</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.7</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 0.0</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>▲ 9.5</b>	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0110403

Lab Number : 06146335

Unique Number : 10976413

Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel )

Received : 11 Apr 2024

Tested : 17 Apr 2024

Diagnosed : 17 Apr 2024 - Jonathan Hester

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)

GFL Environmental - 112 - New Bern

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New Bern, NC

US 28560

Contact: TECHNICIAN ACCOUNT

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F: