



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

Machine Id  
**350051**  
 Component  
**1 Gasoline Engine**  
 Fluid  
**GASOLINE ENGINE OIL SAE 5W30 (6 GAL)**

**RECOMMENDATION**

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0108500</b>	---	---
Sample Date		Client Info		<b>30 Apr 2024</b>	---	---
Machine Age	mls	Client Info		<b>285245</b>	---	---
Oil Age	mls	Client Info		<b>0</b>	---	---
Filter Age	mls	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>18</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>40	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>50	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>155	<b>0</b>	---	---
Tin	ppm	ASTM D5185m	>10	<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>	---	---

**CONTAMINATION**

Sodium and/or potassium levels are high.

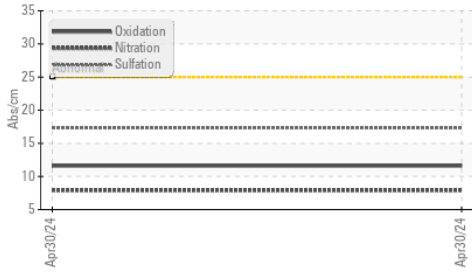
Silicon	ppm	ASTM D5185m	>30	<b>9</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>▲ 60</b>	---	---
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol	%	*ASTM D2982		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844		<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.3</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>	---	---

**FLUID CONDITION**

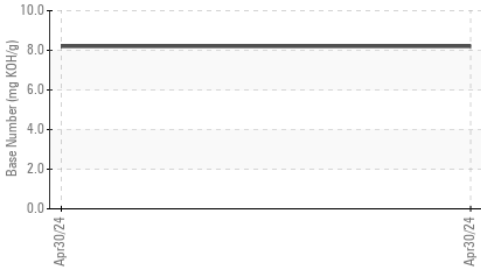
The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>400	<b>▲ 237</b>	---	---
Boron	ppm	ASTM D5185m	75	<b>12</b>	---	---
Barium	ppm	ASTM D5185m	5	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>32</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>105</b>	---	---
Calcium	ppm	ASTM D5185m	2100	<b>2110</b>	---	---
Phosphorus	ppm	ASTM D5185m	650	<b>989</b>	---	---
Zinc	ppm	ASTM D5185m	850	<b>1117</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>3993</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>11.6</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.4</b>	---	---

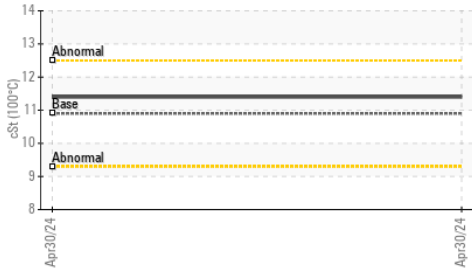
FT-IR (Direct Trend)



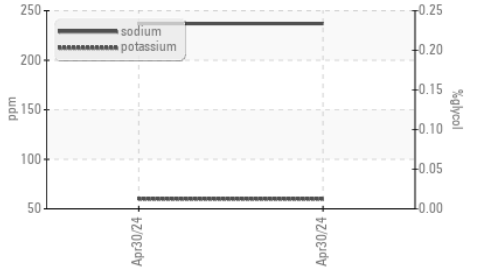
Base Number



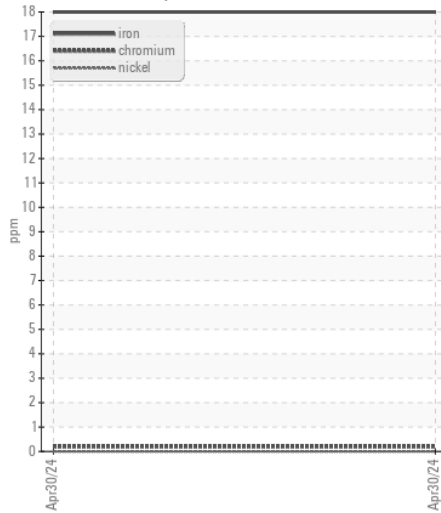
Viscosity @ 100°C



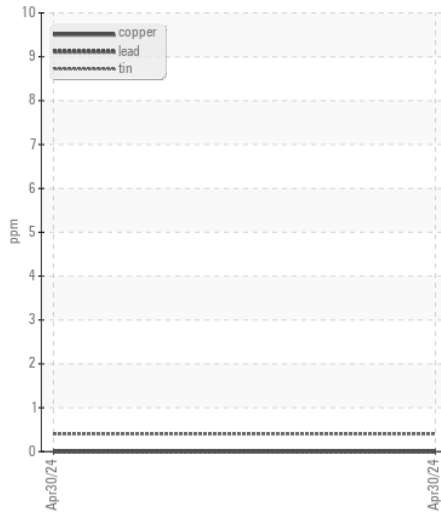
Glycol Contamination



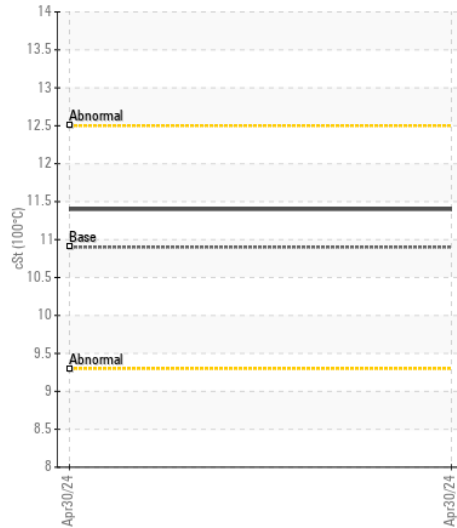
Ferrous Alloys



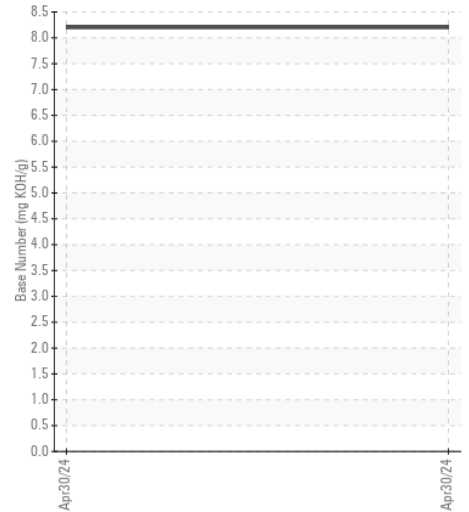
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0108500 **Received** : 14 May 2024  
**Lab Number** : 06178394 **Tested** : 17 May 2024  
**Unique Number** : 11029720 **Diagnosed** : 17 May 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**GFL Environmental - 938 - Hager City**  
 W9724 WIS-35  
 HAGER CITY, WI  
 US 54014  
 Contact: ANDY KANE

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: (715)202-3420

F: