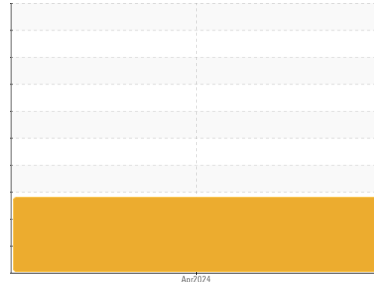




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id

**69**

Component

**Diesel Engine**

Fluid

**WF 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

### ▲ Wear

Piston and cylinder wear is indicated.

### ▲ Contamination

There is a moderate amount of fuel present in the oil.

### ▲ Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0917875</b>	---	---
Sample Date	Client Info		<b>08 Apr 2024</b>	---	---
Machine Age	mls	Client Info	<b>185156</b>	---	---
Oil Age	mls	Client Info	<b>15116</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>▲ 191</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>3</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>6</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>▲ 137</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>5</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>10</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>1</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>14</b>	---	---
Manganese	ppm	ASTM D5185m	<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>36</b>	---	---
Calcium	ppm	ASTM D5185m	<b>2369</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>952</b>	---	---
Zinc	ppm	ASTM D5185m	<b>1098</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>3987</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>13</b>	---	---
Sodium	ppm	ASTM D5185m	<b>8</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>37</b>	---	---
Fuel	%	ASTM D3524 >5	<b>▲ 4.5</b>	---	---

## INFRA-RED

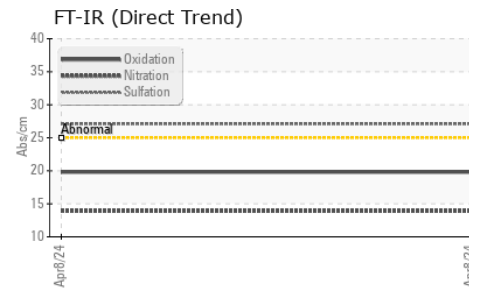
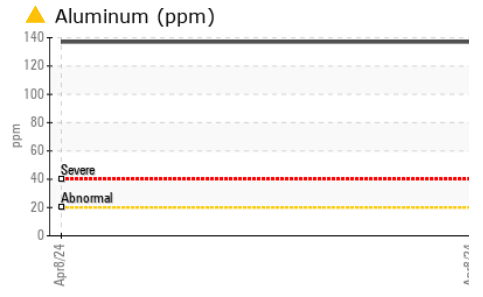
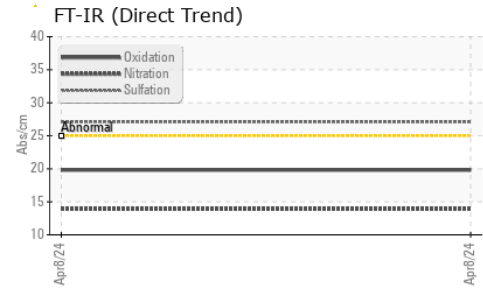
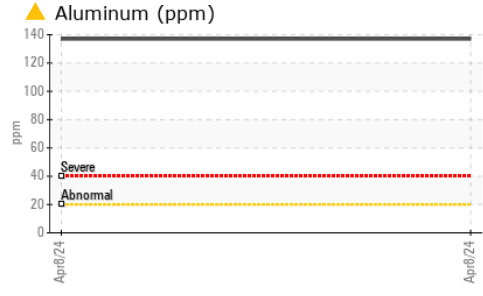
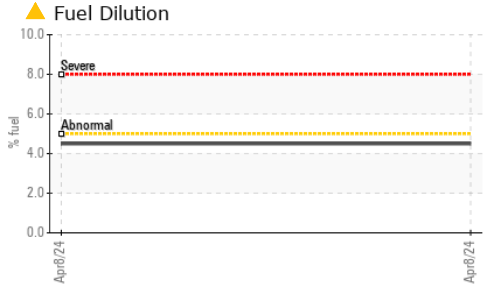
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.9</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.1</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.8</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>5.6</b>	---	---



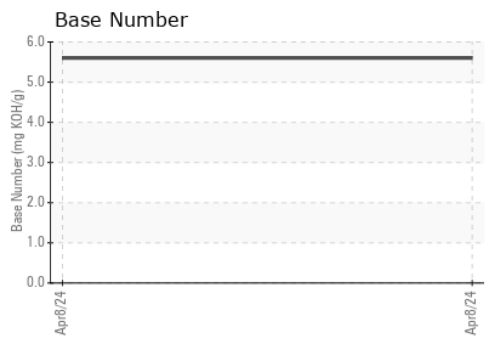
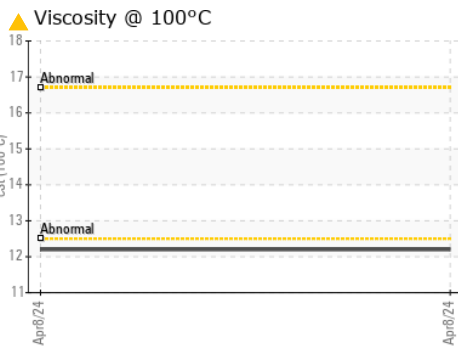
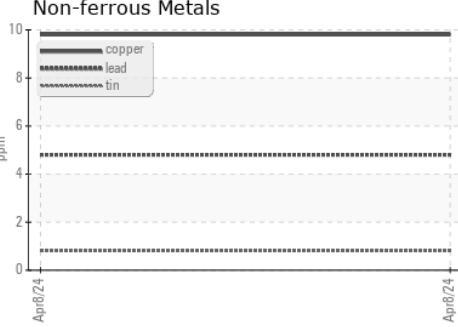
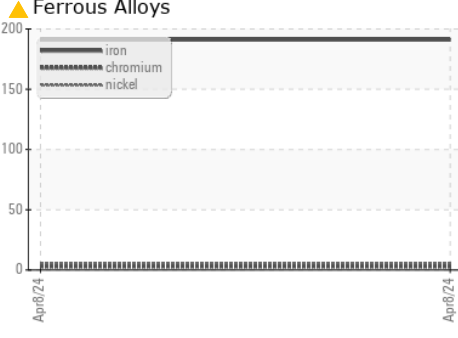
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 12.2	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0917875 **Received** : 12 Apr 2024  
**Lab Number** : 06147127 **Tested** : 17 Apr 2024  
**Unique Number** : 10977205 **Diagnosed** : 17 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GLOUCESTER COUNTY PUBLIC SCHOOLS**  
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 GLOUCESTER, VA  
 US 23061  
 Contact: DANIEL BURNETT  
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 T: (804)693-1472  
 F:

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)