



# OIL ANALYSIS REPORT

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

Machine Id  
**159**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC06160024</b>	---	---
Sample Date		Client Info		<b>24 Apr 2024</b>	---	---
Machine Age	mls	Client Info		<b>128715</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

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	<b>▲ 202</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>88</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>11</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>8</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>0</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

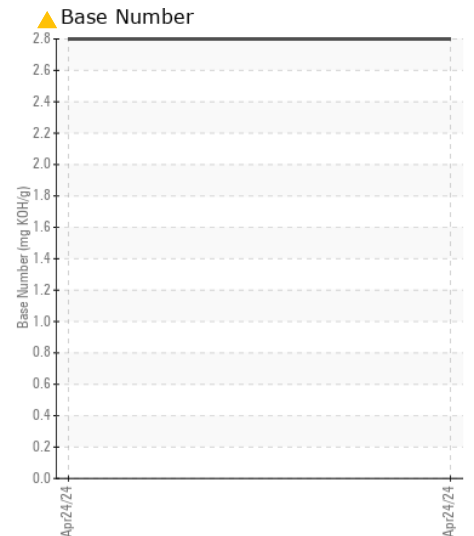
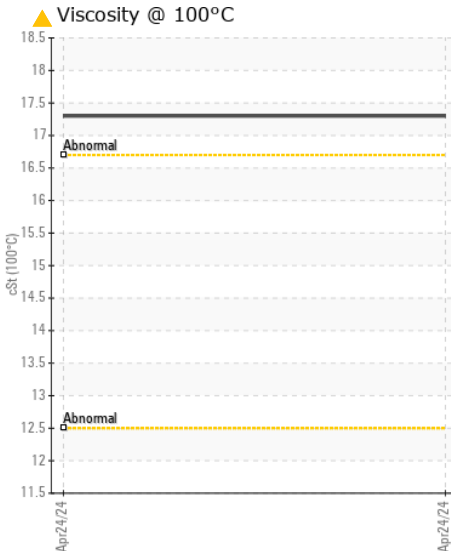
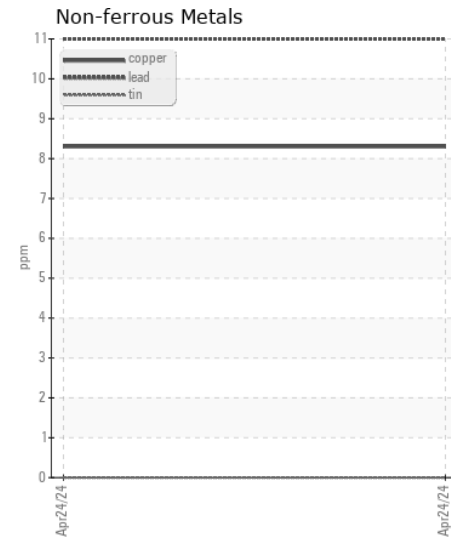
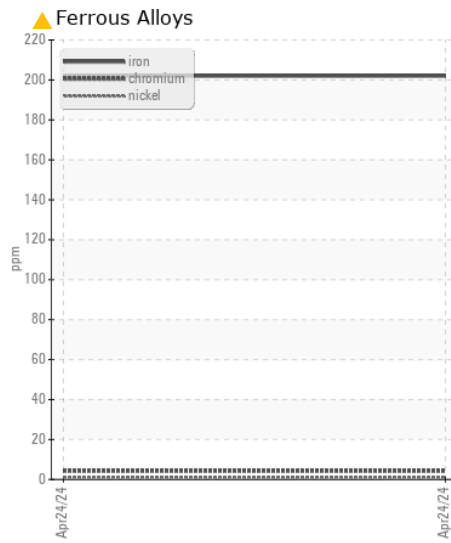
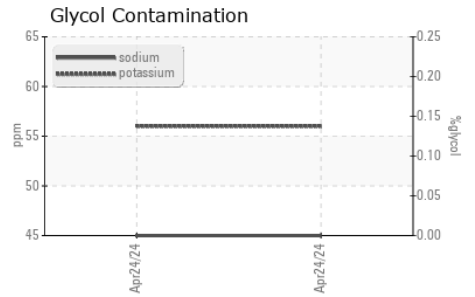
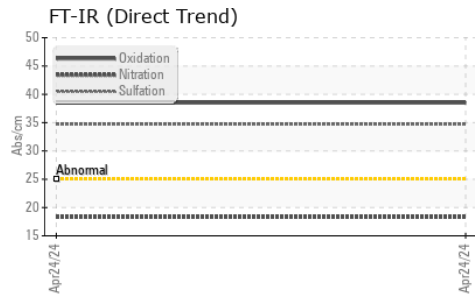
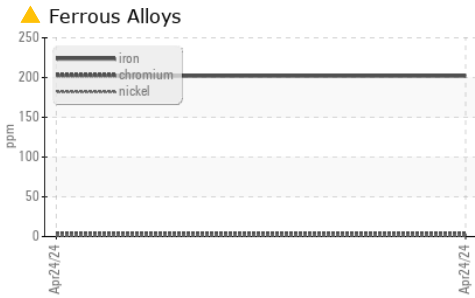
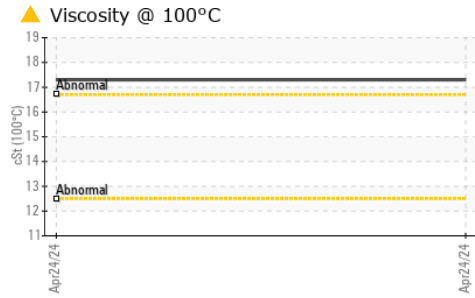
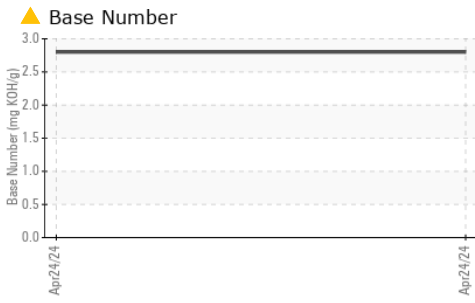
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>▲ 56</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol	%	*ASTM D2982		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>18.3</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>34.7</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 oil viscosity is higher than normal. The BN level is low.

Sodium	ppm	ASTM D5185m		<b>45</b>	---	---
Boron	ppm	ASTM D5185m		<b>41</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>13</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>512</b>	---	---
Calcium	ppm	ASTM D5185m		<b>2088</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1113</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1418</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>4180</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>38.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>▲ 2.8</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>▲ 17.3</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC06160024 **Received** : 25 Apr 2024  
**Lab Number** : 06160024 **Tested** : 30 Apr 2024  
**Unique Number** : 10995447 **Diagnosed** : 30 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: Glycol )

**LONNIE SONGER**  
 1820 SHELTON MISSION RD  
 GREENEVILLE, TN  
 US 37743  
 Contact: LONNIE SONGER

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:  
F: