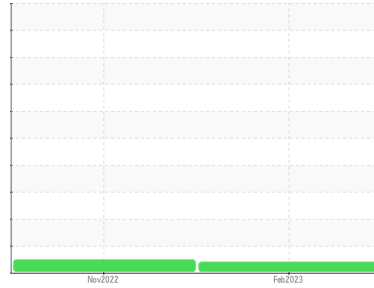




# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

**122**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC05790715</b>	WC05699560	---
Sample Date	Client Info		<b>18 Feb 2023</b>	12 Nov 2022	---
Machine Age	mls	Client Info	<b>193347</b>	166490	---
Oil Age	mls	Client Info	<b>26857</b>	53104	---
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	---
Sample Status			<b>ATTENTION</b>	NORMAL	---

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>27</b>	47	---
Chromium	ppm	ASTM D5185m >20	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>10</b>	12	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>8</b>	14	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>&lt;1</b>	0	---
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 100	<b>65</b>	68	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 450	<b>863</b>	459	---
Calcium	ppm	ASTM D5185m 3000	<b>1279</b>	1939	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1057</b>	1014	---
Zinc	ppm	ASTM D5185m 1350	<b>1291</b>	1261	---
Sulfur	ppm	ASTM D5185m 4250	<b>2977</b>	3081	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	9	---
Sodium	ppm	ASTM D5185m >216	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>17</b>	22	---
Fuel	%	ASTM D3524 >5	<b>0.2</b>	<1.0	---

## INFRA-RED

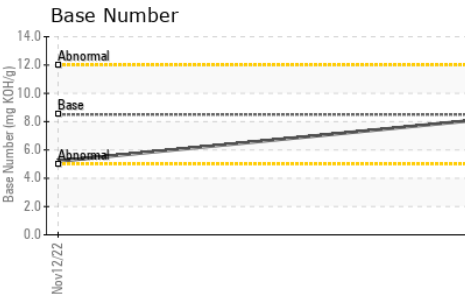
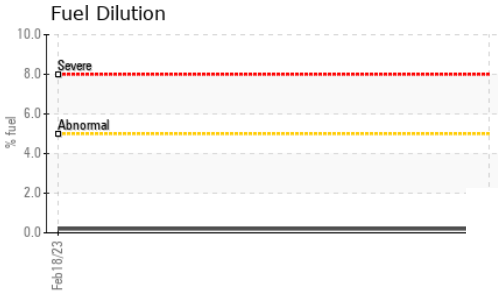
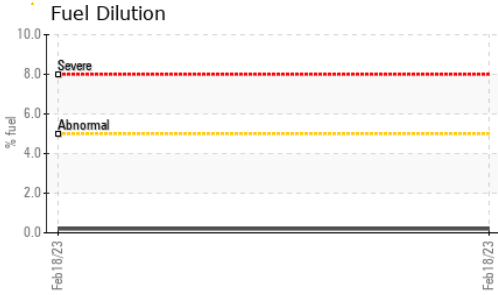
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	1.3	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.6</b>	13.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.1</b>	30.0	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.6</b>	28.1	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>8.2</b>	5.2	---



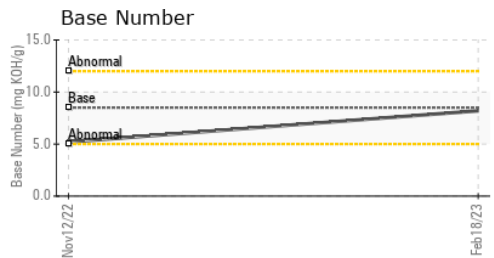
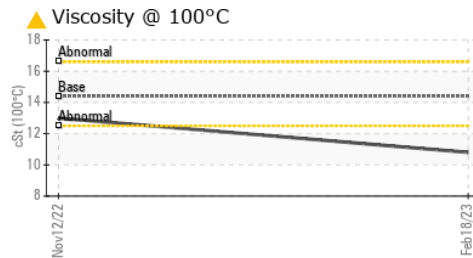
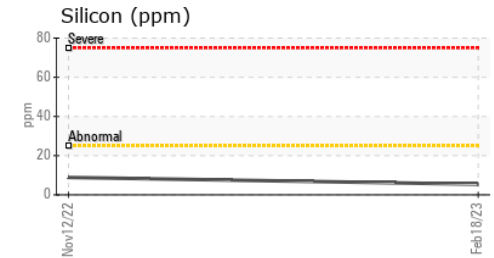
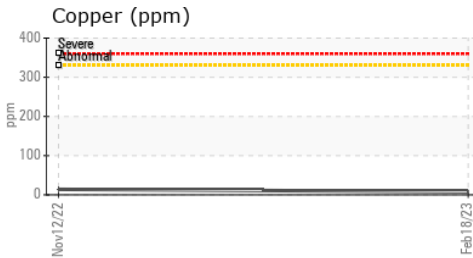
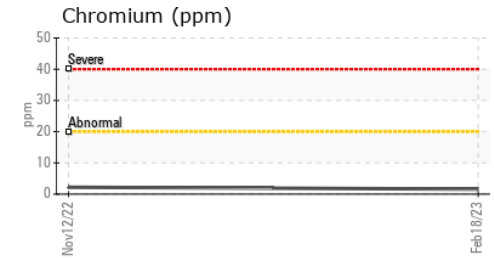
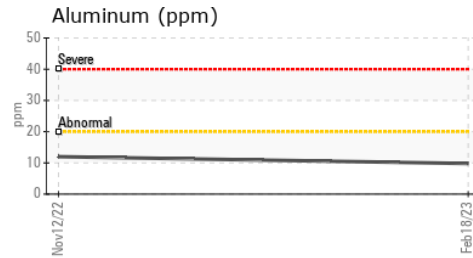
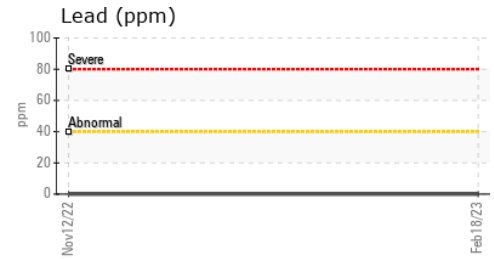
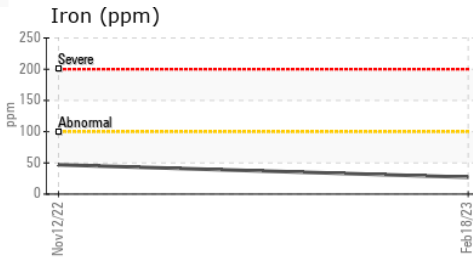
# OIL ANALYSIS REPORT



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	14.4	▲ 10.8	13.0

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC05790715 **Received** : 14 Mar 2023  
**Lab Number** : 05790715 **Diagnosed** : 17 Mar 2023  
**Unique Number** : 10375386 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN )

**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: