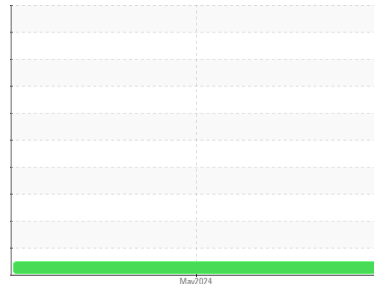




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**FREIGHTLINER Green freightliner**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 15W40 (12 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

Metal levels are typical for a components first oil change.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0006622</b>	---	---
Sample Date	Client Info		<b>03 May 2024</b>	---	---
Machine Age	mls Client Info		<b>533374</b>	---	---
Oil Age	mls Client Info		<b>533374</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	---	---
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	>200	<b>16</b>	---	---
Chromium	ppm ASTM D5185m	>6	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m	>3	<b>0</b>	---	---
Titanium	ppm ASTM D5185m	>2	<b>0</b>	---	---
Silver	ppm ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m	>50	<b>2</b>	---	---
Lead	ppm ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm ASTM D5185m	>50	<b>1</b>	---	---
Tin	ppm ASTM D5185m	>6	<b>0</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	250	<b>48</b>	---	---
Barium	ppm ASTM D5185m	10	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	100	<b>39</b>	---	---
Manganese	ppm ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm ASTM D5185m	450	<b>525</b>	---	---
Calcium	ppm ASTM D5185m	3000	<b>1650</b>	---	---
Phosphorus	ppm ASTM D5185m	1150	<b>780</b>	---	---
Zinc	ppm ASTM D5185m	1350	<b>936</b>	---	---
Sulfur	ppm ASTM D5185m	4250	<b>2585</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>50	<b>5</b>	---	---
Sodium	ppm ASTM D5185m	>158	<b>2</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>0</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	<b>1.6</b>	---	---
Nitration	Abs/cm *ASTM D7624	>20	<b>9.1</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	<b>24.1</b>	---	---

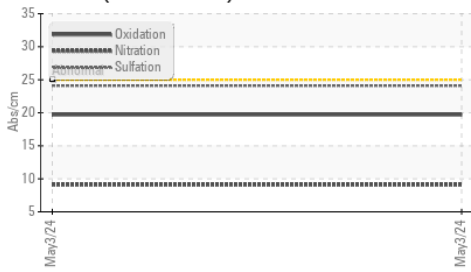
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>19.7</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896	8.5	<b>7.9</b>	---	---

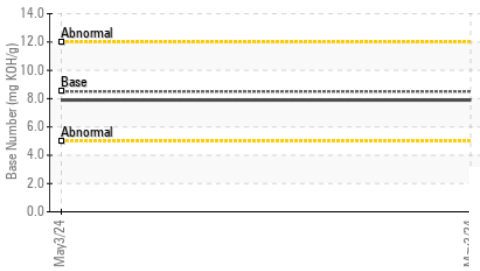


# OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

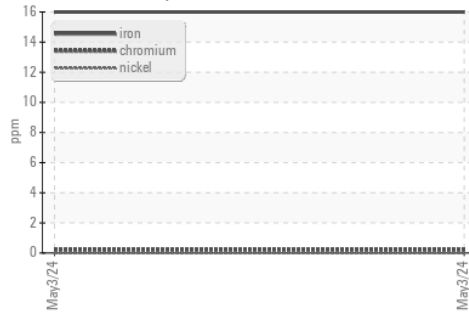


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

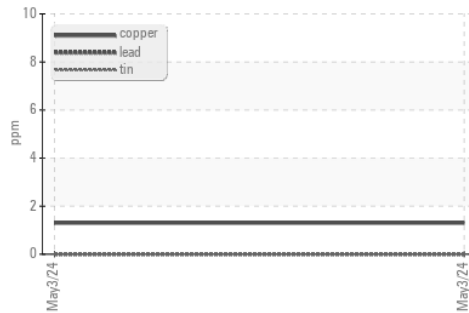
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.4</b>	---	---

## GRAPHS

Ferrous Alloys



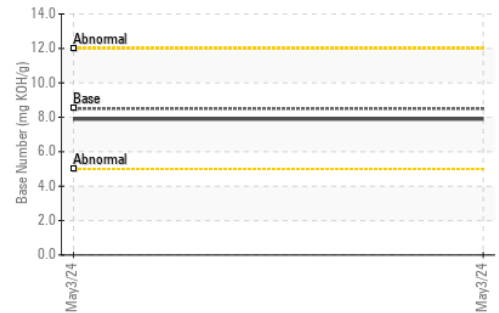
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006622      **Received** : 30 May 2024  
**Lab Number** : **06195235**      **Tested** : 31 May 2024  
**Unique Number** : 11057358      **Diagnosed** : 31 May 2024 - Wes Davis  
**Test Package** : FLEET

**RODNEY BROWN**  
 8834 587TH AVE  
 PONCA, NE  
 US 68770

Contact: TRAVIS GARRISON  
 garrison092012@gmail.com

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: