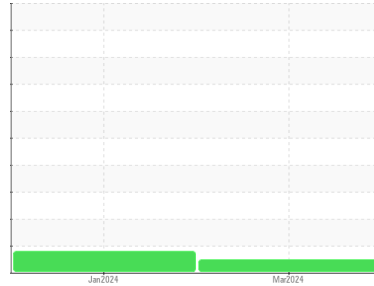




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**MACK 12372**  
 Component  
**Diesel Engine**  
 Fluid  
**AMERIGUARD 10W30 (38 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>SBP0006751</b>	SBP0006409	---
Sample Date	Client Info		<b>12 Mar 2024</b>	04 Jan 2024	---
Machine Age	mls	Client Info	<b>22093</b>	15631	---
Oil Age	mls	Client Info	<b>6462</b>	6990	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>11</b>	17	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	2	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	4	---
Lead	ppm	ASTM D5185m	>30	<b>0</b>	2	---
Copper	ppm	ASTM D5185m	>30	<b>33</b>	▲ 162	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	---
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		<b>12</b>	38	---
Barium	ppm	ASTM D5185m		<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m		<b>56</b>	56	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m		<b>854</b>	719	---
Calcium	ppm	ASTM D5185m		<b>1189</b>	1445	---
Phosphorus	ppm	ASTM D5185m		<b>1003</b>	862	---
Zinc	ppm	ASTM D5185m		<b>1185</b>	1049	---
Sulfur	ppm	ASTM D5185m		<b>3380</b>	2689	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>6</b>	11	---
Sodium	ppm	ASTM D5185m		<b>1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	11	---

## INFRA-RED

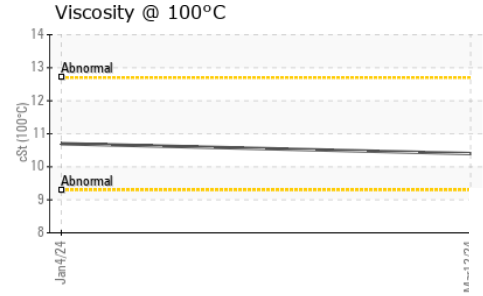
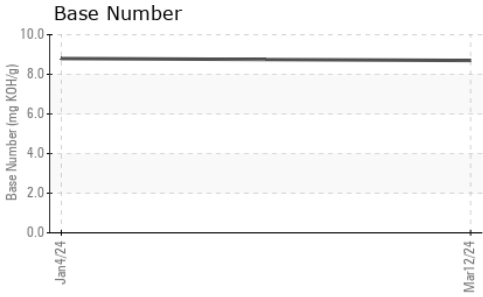
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	8.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.3</b>	22.2	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	19.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.7</b>	8.8	---



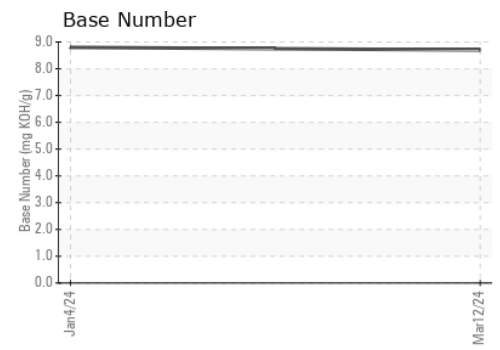
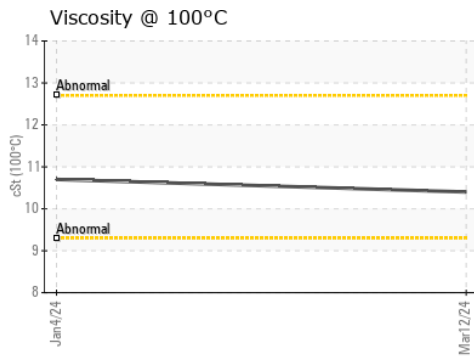
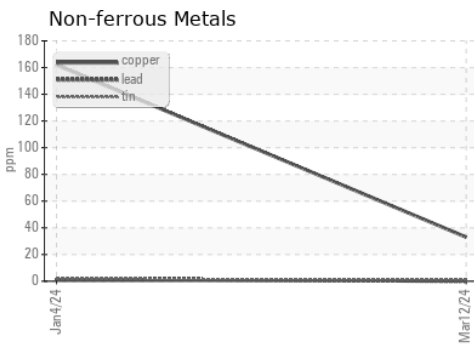
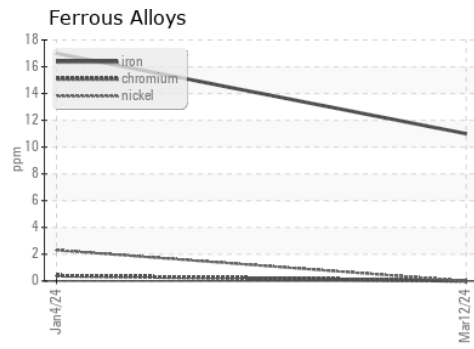
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	<b>10.4</b>	10.7	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0006751      **Received** : 20 Mar 2024  
**Lab Number** : **06124231**      **Tested** : 21 Mar 2024  
**Unique Number** : 10938382      **Diagnosed** : 21 Mar 2024 - Wes Davis  
**Test Package** : FLEET

**GAGE COUNTY HIGHWAY DEPARTMENT**  
 823 SOUTH 8TH ST  
 BEATRICE, NE  
 US 68310  
 Contact: MARK KUHNKE  
 mkuhnke@gagecountyne.gov  
 T: (402)223-1395  
 F: (402)223-1351

Certificate L2367  
 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)