



# PROBLEM SUMMARY

Sample Rating Trend



**WEAR**



Machine Id

**2327**

Component

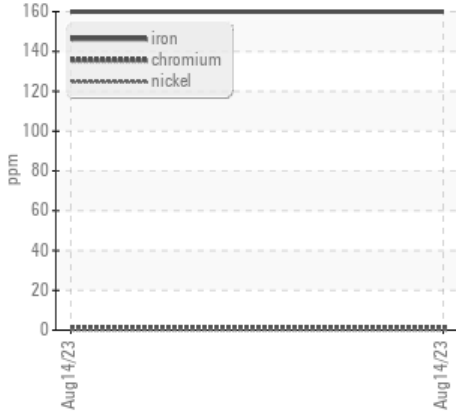
**Diesel Engine**

Fluid

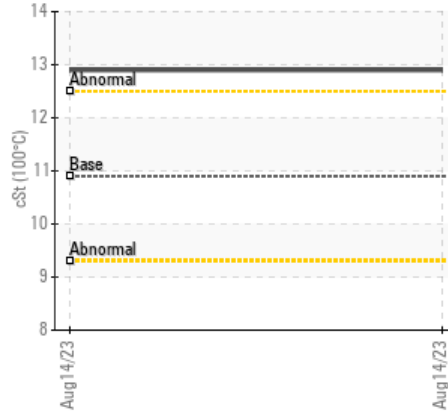
**DIESEL ENGINE OIL SAE 5W30 (--- QTS)**

## COMPONENT CONDITION SUMMARY

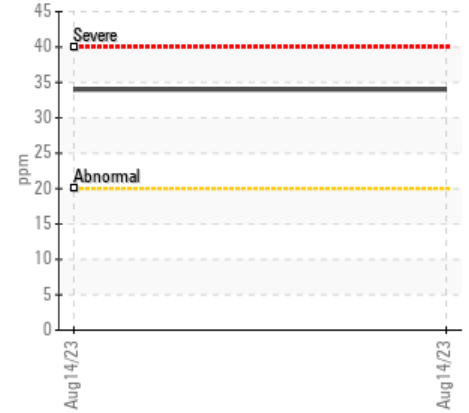
### ▲ Ferrous Alloys



### ▲ Viscosity @ 100°C



### Aluminum (ppm)



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185m	>100	▲ 160	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	▲ 12.9	---	---

Customer Id: MABEDE  
 Sample No.: WC0836268  
 Lab Number: 05930217  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



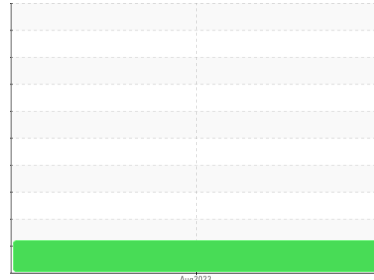
Machine Id  
**2327**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 5W30 (--- QTS)**



## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### ▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The oil viscosity is higher 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>WC0836268</b>	---	---
Sample Date	Client Info		<b>14 Aug 2023</b>	---	---
Machine Age	mls	Client Info	<b>98234</b>	---	---
Oil Age	mls	Client Info	<b>5000</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>▲ 160</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>34</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>23</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>21</b>	---	---
Barium	ppm	ASTM D5185m 10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 100	<b>45</b>	---	---
Manganese	ppm	ASTM D5185m	<b>3</b>	---	---
Magnesium	ppm	ASTM D5185m 450	<b>980</b>	---	---
Calcium	ppm	ASTM D5185m 3000	<b>1202</b>	---	---
Phosphorus	ppm	ASTM D5185m 1150	<b>911</b>	---	---
Zinc	ppm	ASTM D5185m 1350	<b>1113</b>	---	---
Sulfur	ppm	ASTM D5185m 4250	<b>3675</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>18</b>	---	---
Sodium	ppm	ASTM D5185m	<b>8</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>90</b>	---	---

## INFRA-RED

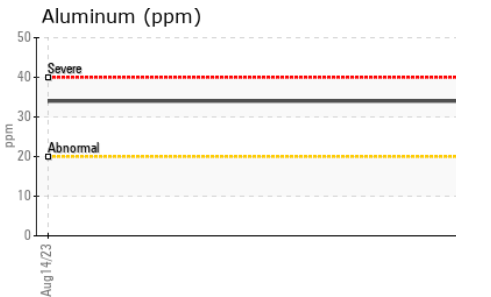
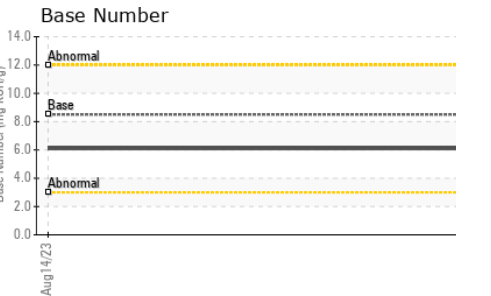
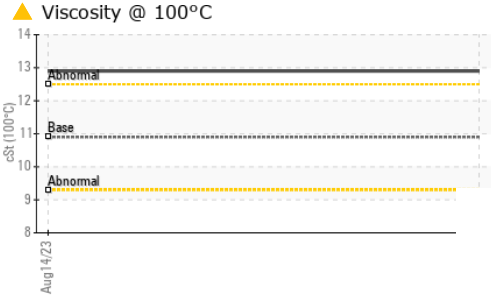
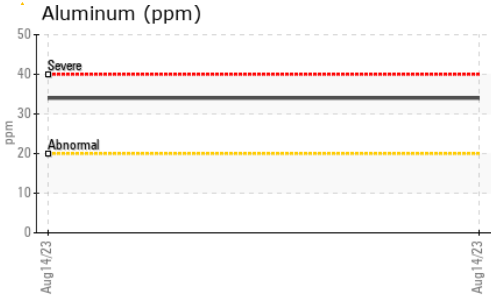
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>15.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.1</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>28.1</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>6.1</b>	---	---



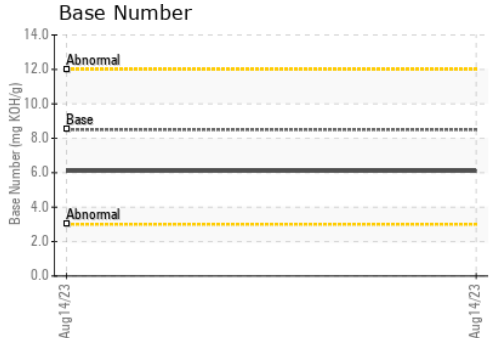
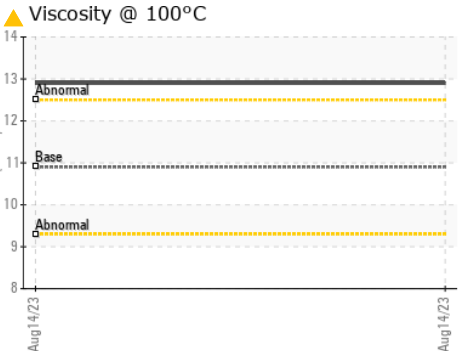
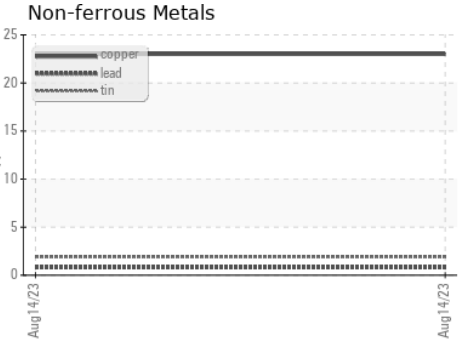
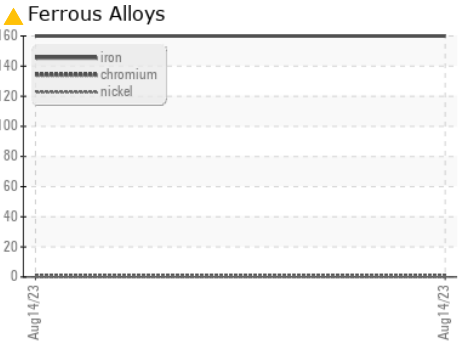
# OIL ANALYSIS REPORT



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	10.9	▲ 12.9	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0836268      **Received** : 21 Aug 2023  
**Lab Number** : 05930217      **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10615488      **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**MABE TRUCKING**  
 PO BOX 1081  
 EDEN, NC  
 US 27289  
 Contact: MAINTENANCE  
 maintenancemanager@mabetrucking.com  
 T:  
 F: (336)635-1791

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)