



Area  
**TRACTORS**  
 Machine Id  
**[TRACTORS] 161**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

Sample Rating Trend



**DEGRADATION**



**COMPONENT CONDITION SUMMARY**

No relevant graphs to display


**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>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>▲ 3.2</b>	---	---

**Customer Id:** ARMBEANE  
**Sample No.:** SBP0001920  
**Lab Number:** 05958980  
**Test Package:** FLEET



*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

*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



DEGRADATION



Area  
**TRACTORS**  
 Machine Id  
**[TRACTORS] 161**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The BN level is low. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>SBP0001920</b>	---	---
Sample Date	Client Info	<b>14 Sep 2023</b>	---	---
Machine Age	mls Client Info	<b>420431</b>	---	---
Oil Age	mls Client Info	<b>25000</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >120	<b>33</b>	---	---
Chromium ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel ppm	ASTM D5185m >5	<b>&lt;1</b>	---	---
Titanium ppm	ASTM D5185m >2	<b>&lt;1</b>	---	---
Silver ppm	ASTM D5185m >2	<b>0</b>	---	---
Aluminum ppm	ASTM D5185m >20	<b>2</b>	---	---
Lead ppm	ASTM D5185m >40	<b>2</b>	---	---
Copper ppm	ASTM D5185m >330	<b>8</b>	---	---
Tin ppm	ASTM D5185m >15	<b>&lt;1</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>34</b>	---	---
Barium ppm	ASTM D5185m 10	<b>0</b>	---	---
Molybdenum ppm	ASTM D5185m 100	<b>&lt;1</b>	---	---
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium ppm	ASTM D5185m 450	<b>33</b>	---	---
Calcium ppm	ASTM D5185m 3000	<b>2211</b>	---	---
Phosphorus ppm	ASTM D5185m 1150	<b>969</b>	---	---
Zinc ppm	ASTM D5185m 1350	<b>1202</b>	---	---
Sulfur ppm	ASTM D5185m 4250	<b>3901</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	<b>11</b>	---	---
Sodium ppm	ASTM D5185m >158	<b>6</b>	---	---
Potassium ppm	ASTM D5185m >20	<b>6</b>	---	---

## INFRA-RED

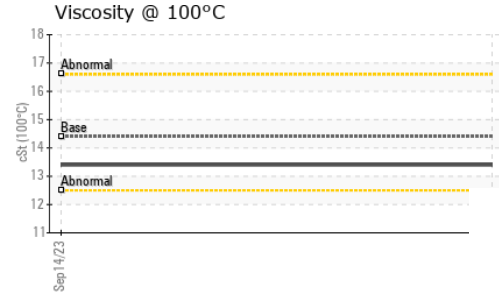
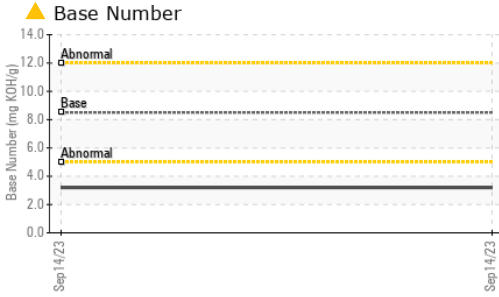
method	limit/base	current	history1	history2
Soot %	*ASTM D7844 >4	<b>0.6</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>10.2</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>26.6</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>22.5</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>▲ 3.2</b>	---	---



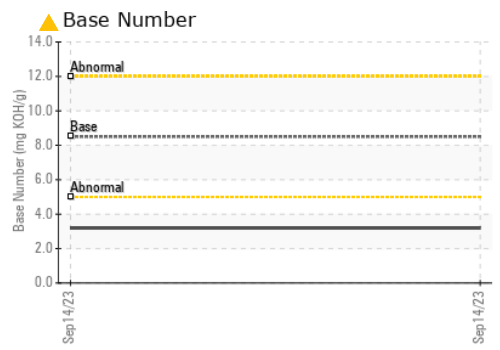
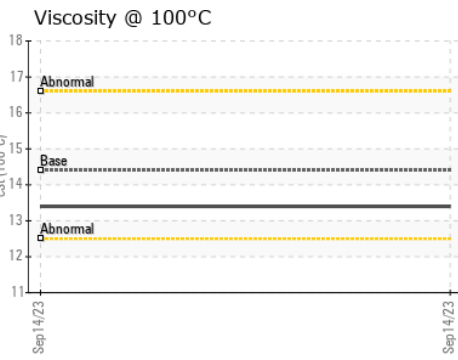
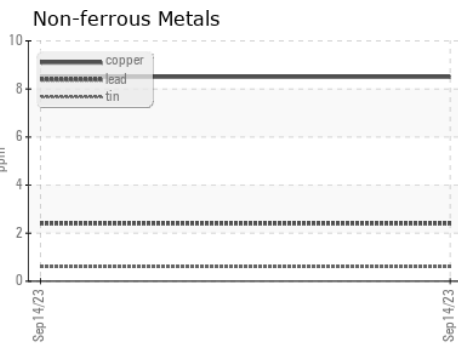
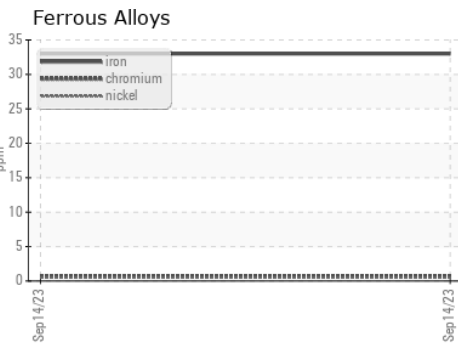
# OIL ANALYSIS REPORT



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	14.4	13.4	---	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0001920 **Received** : 22 Sep 2023  
**Lab Number** : 05958980 **Diagnosed** : 25 Sep 2023  
**Unique Number** : 10660193 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**ARMSTRONG RENTALS LLC**  
 2600 RIDGEVIEW DRIVE  
 BEATRICE, NE  
 US 68310  
 Contact: JOE ARMSTRONG  
 joea@armstrongrentalsllc.com  
 T: (402)239-9930  
 F:

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)