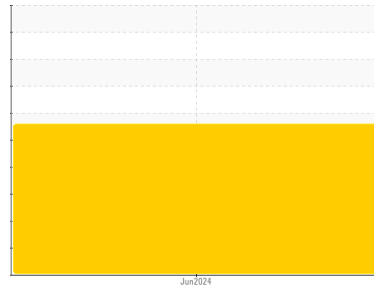




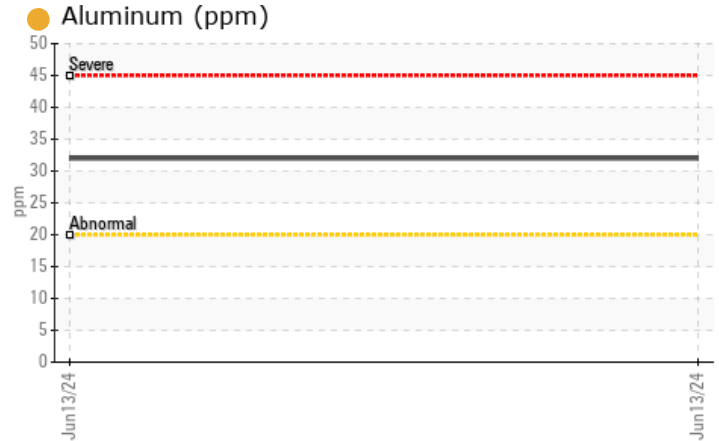
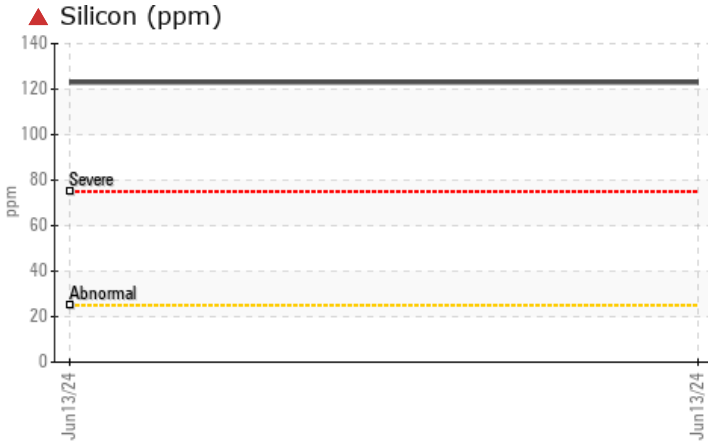
# PROBLEM SUMMARY

Area  
**DUMP TRUCKS**  
 Machine Id  
**[DUMP TRUCKS] 139**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## Sample Rating Trend



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 123	---	---

Customer Id: ARMBEANE  
 Sample No.: SBP0007537  
 Lab Number: 06217649  
 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
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Area  
**DUMP TRUCKS**  
 Machine Id  
**[DUMP TRUCKS] 139**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## Sample Rating Trend



DIRT



## DIAGNOSIS

### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0007537</b>	---	---
Sample Date	Client Info		<b>13 Jun 2024</b>	---	---
Machine Age	mls	Client Info	<b>1093916</b>	---	---
Oil Age	mls	Client Info	<b>25000</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</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>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	<b>82</b>	---
Chromium	ppm	ASTM D5185m	>20	<b>5</b>	---
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	---
Titanium	ppm	ASTM D5185m	>2	<b>1</b>	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>20	<b>32</b>	---
Lead	ppm	ASTM D5185m	>40	<b>5</b>	---
Copper	ppm	ASTM D5185m	>330	<b>8</b>	---
Tin	ppm	ASTM D5185m	>15	<b>3</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>6</b>	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	100	<b>66</b>	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---
Magnesium	ppm	ASTM D5185m	450	<b>1006</b>	---
Calcium	ppm	ASTM D5185m	3000	<b>1204</b>	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1102</b>	---
Zinc	ppm	ASTM D5185m	1350	<b>1333</b>	---
Sulfur	ppm	ASTM D5185m	4250	<b>2999</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>▲ 123</b>	---
Sodium	ppm	ASTM D5185m		<b>12</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>30</b>	---
Glycol	%	*ASTM D2982		<b>NEG</b>	---

## INFRA-RED

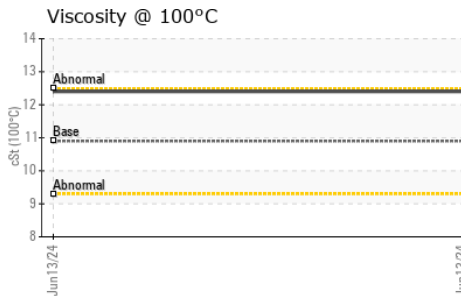
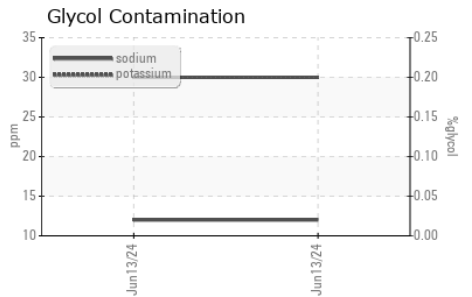
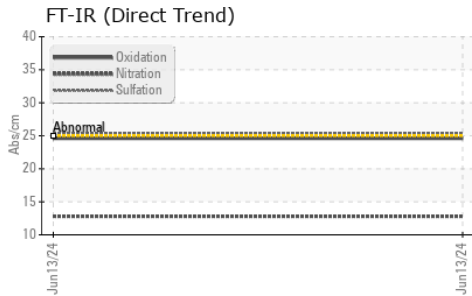
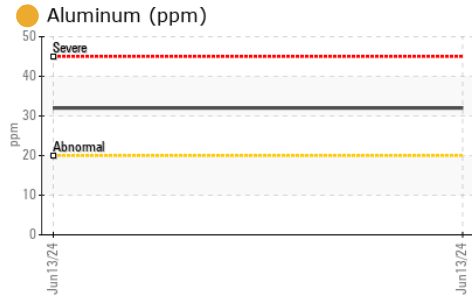
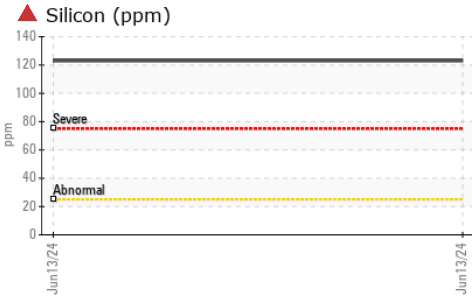
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	<b>0.3</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.8</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.3</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.6</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>4.4</b>	---



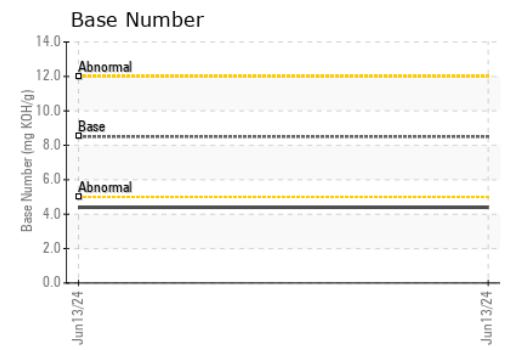
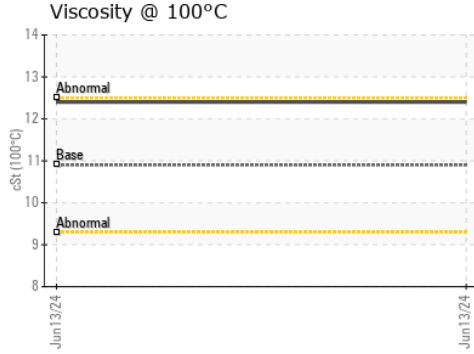
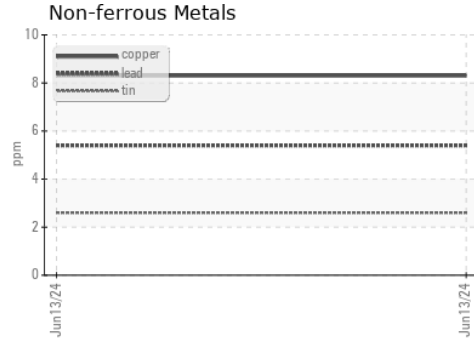
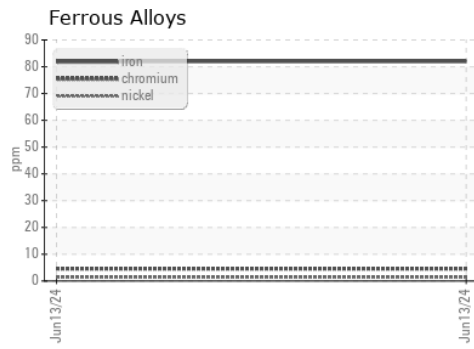
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	<b>12.4</b>	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0007537 **Received** : 21 Jun 2024  
**Lab Number** : 06217649 **Tested** : 25 Jun 2024  
**Unique Number** : 11090513 **Diagnosed** : 25 Jun 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: Glycol )

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

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)