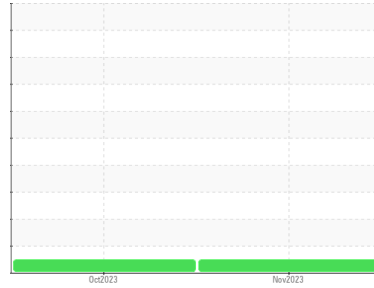




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Bernardsville**  
 Machine Id  
**ISUZU 3464**

Component  
**Diesel Engine**  
 Fluid  
**GIBRALTAR 15W/40 SUPER S-3 LX (11)**

## DIAGNOSIS

### Recommendation

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 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>WC0875359</b>	WC0864890	---
Sample Date	Client Info			<b>24 Nov 2023</b>	20 Oct 2023	---
Machine Age	hrs	Client Info		<b>4312</b>	4038	---
Oil Age	hrs	Client Info		<b>0</b>	4038	---
Oil Changed	Client Info			<b>Not Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<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	>100	<b>11</b>	32	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	4	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>24</b>	12	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	66	<b>61</b>	66	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	1000	<b>628</b>	850	---
Calcium	ppm	ASTM D5185m	1050	<b>1257</b>	1346	---
Phosphorus	ppm	ASTM D5185m	1150	<b>970</b>	1042	---
Zinc	ppm	ASTM D5185m	1270	<b>1116</b>	1278	---
Sulfur	ppm	ASTM D5185m		<b>3488</b>	3110	---

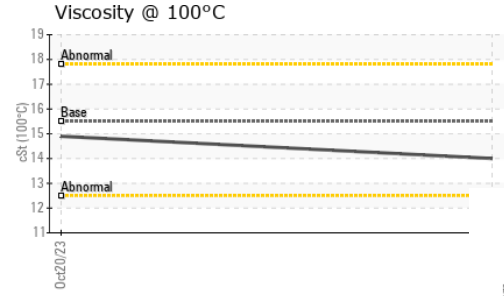
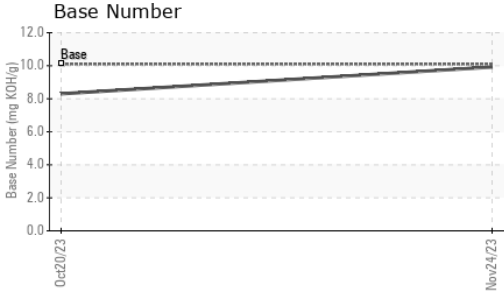
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	9	---
Sodium	ppm	ASTM D5185m		<b>0</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.5</b>	22.2	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.2</b>	18.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>9.92</b>	8.3	---



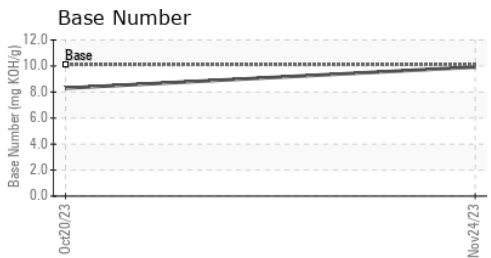
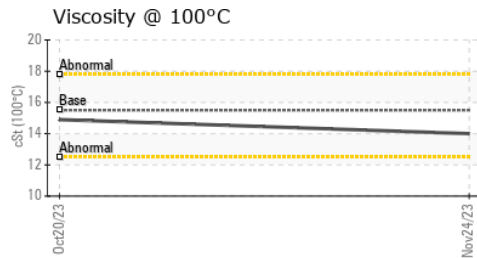
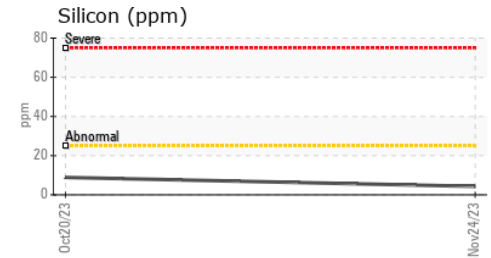
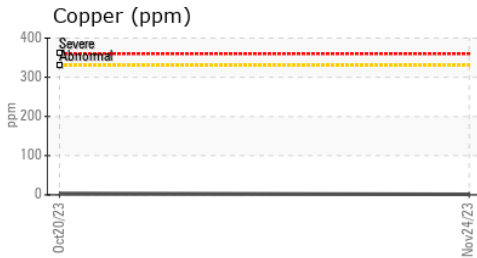
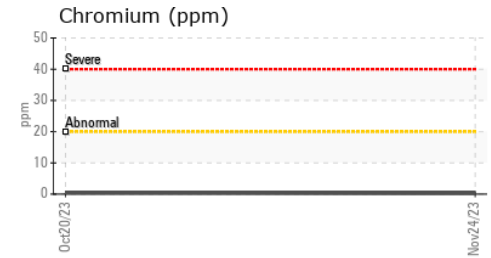
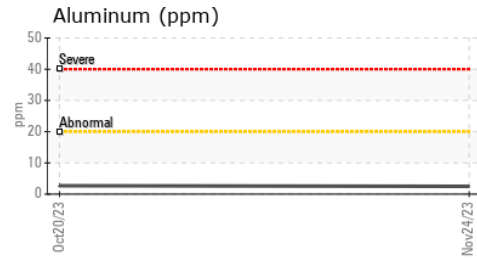
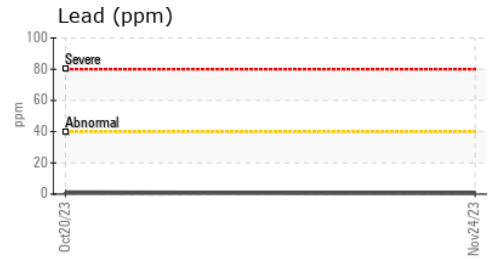
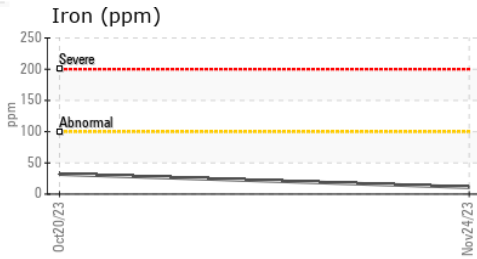
# OIL ANALYSIS REPORT



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	15.5	<b>14.0</b>	14.9	---

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0875359      **Received** : 06 Dec 2023  
**Lab Number** : **06027215**      **Diagnosed** : 08 Dec 2023  
**Unique Number** : 10777006      **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

**INTERSTATE WASTE-BERNARDSVILLE**  
 33 OLD QUARRY ROAD  
 BERNARDSVILLE, NJ  
 US 07924  
 Contact: Pablo Chardon  
 PChardon@interstatewaste.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: