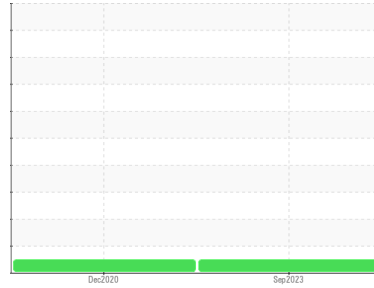




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**M-223**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 632 (--- GAL)**

## 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0747963</b>	WC0453558	---
Sample Date	Client Info			<b>27 Sep 2023</b>	29 Dec 2020	---
Machine Age	hrs	Client Info		<b>85638</b>	61000	---
Oil Age	hrs	Client Info		<b>20000</b>	8000	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>5</b>	4	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>200	<b>0</b>	0	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185m	>5	<b>---</b>	0	---
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>0</b>	6	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	---
Calcium	ppm	ASTM D5185m		<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m		<b>512</b>	461	---
Zinc	ppm	ASTM D5185m		<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m		<b>88</b>	64	---

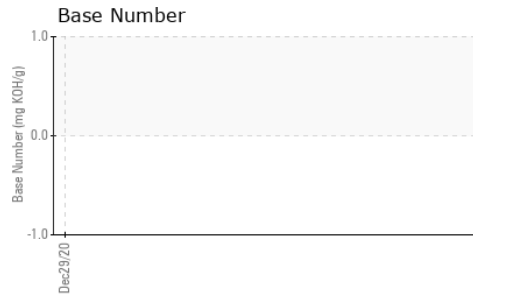
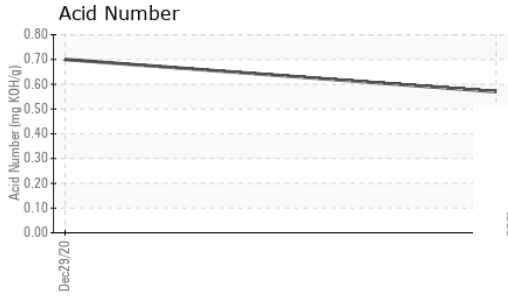
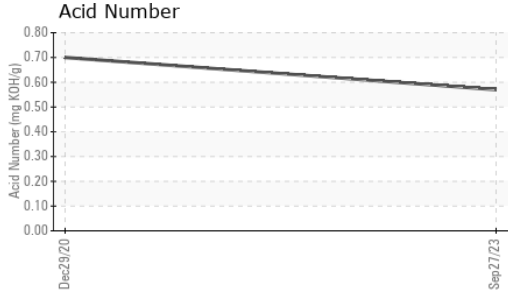
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>22</b>	22	---
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.57</b>	0.700	---

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	---



# OIL ANALYSIS REPORT

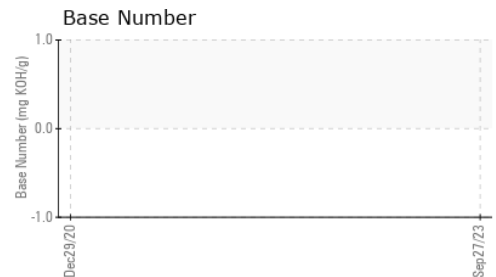
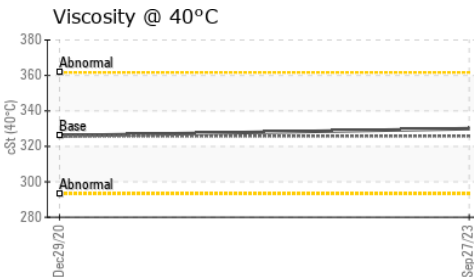
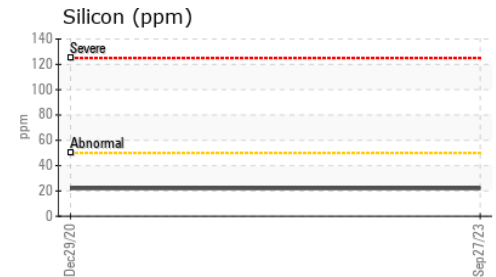
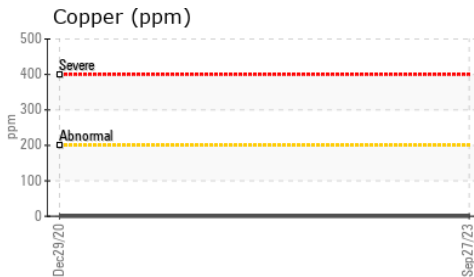
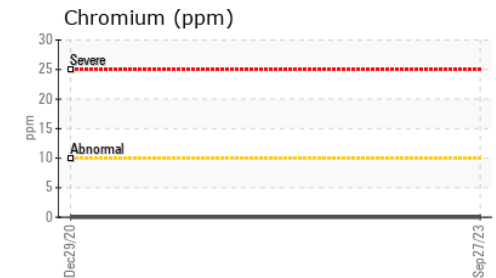
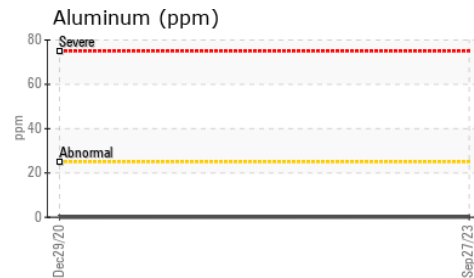
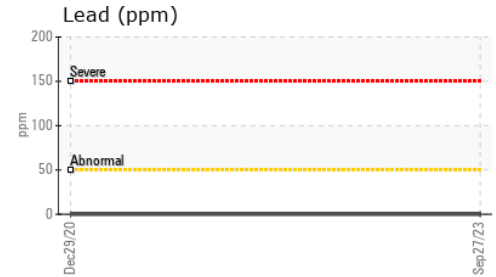
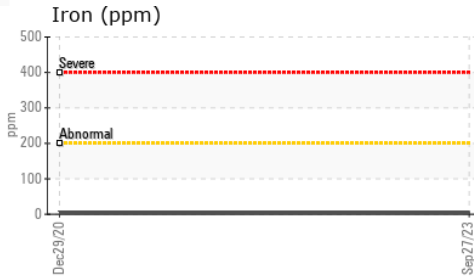


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	325.8	330	326

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color	no image	no image	no image		
Bottom	no image	no image	no image		

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0747963 **Received** : 02 Oct 2023  
**Lab Number** : 05966486 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10673037 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: TBN )

**KB BIOENERGY INC**  
 2677 RIVERVIEW RD  
 AKRON, OH  
 US 44313

Contact: ERIC FOX  
 ericf@kbbioenergy.com;jwatson@wearcheckusa.com  
 T: (330)864-2621  
 F: (330)864-7023

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)