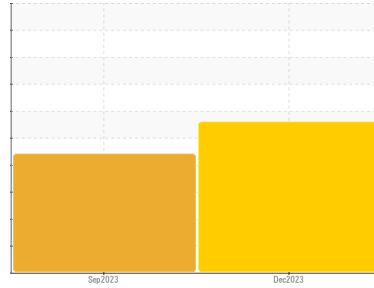




# PROBLEM SUMMARY

Sample Rating Trend

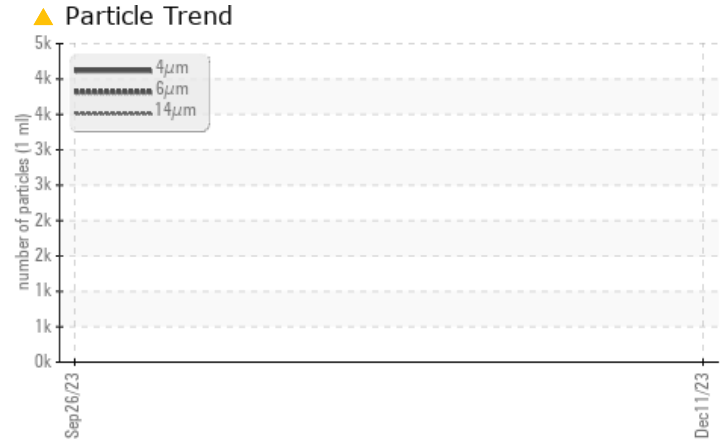
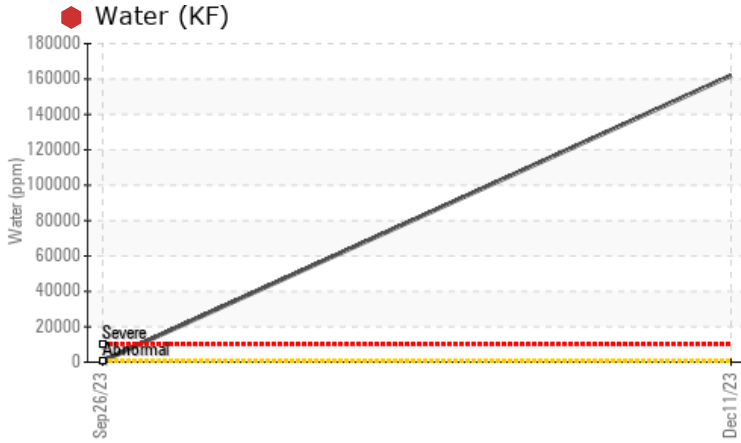


WATER



Machine Id  
**8920230 (S/N 12372)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We recommend you service the filters on this component. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Water	%	ASTM D6304	>0.05	🔴 16.2	🟡 0.057	---
ppm Water	ppm	ASTM D6304	>500	🔴 162000	🟡 570	---
Particles >6µm		ASTM D7647	>1300	🟡 2360	---	---
Particles >14µm		ASTM D7647	>80	🟡 402	---	---
Particles >21µm		ASTM D7647	>20	🟡 135	---	---
Particles >38µm		ASTM D7647	>4	🟡 21	---	---
Particles >71µm		ASTM D7647	>3	🟡 2	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	🟡 19/18/16	---	---

Customer Id: COBMARGEO  
 Sample No.: KCPA004685  
 Lab Number: 06073907  
 Test Package: IND 2



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 Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

26 Sep 2023 Diag: Don Baldrige

WATER



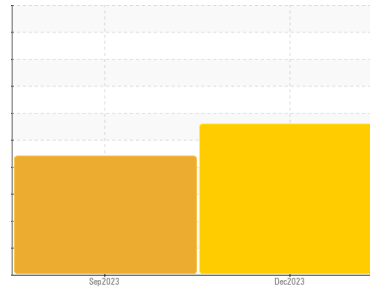
The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil. There is a trace of moisture present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**8920230 (S/N 12372)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) M-460 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

We recommend you service the filters on this component. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

**Wear**

All component wear rates are normal.

**Contamination**

There is a high amount of particulates present in the oil. There is a high concentration of water present in the oil.

**Fluid Condition**

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>KCPA004685</b>	KCPA006195	---
Sample Date	Client Info		<b>11 Dec 2023</b>	26 Sep 2023	---
Machine Age	hrs	Client Info	<b>566</b>	257	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>SEVERE</b>	ABNORMAL	---

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>2</b>	3	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>4</b>	8	---
Tin	ppm	ASTM D5185m >10	<b>0</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 0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>6</b>	<1	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>43</b>	<1	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	0	---
Zinc	ppm	ASTM D5185m 0	<b>7</b>	41	---
Sulfur	ppm	ASTM D5185m 23500	<b>17801</b>	22663	---

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>4</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	---
Water	%	ASTM D6304 >0.05	<b>16.2</b>	0.057	---
ppm Water	ppm	ASTM D6304 >500	<b>162000</b>	570	---

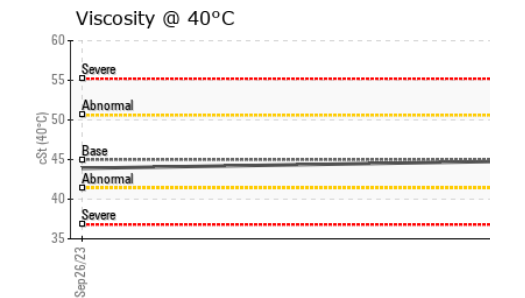
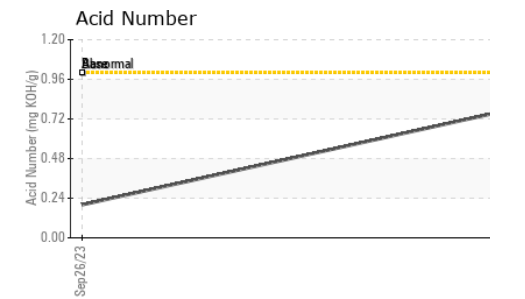
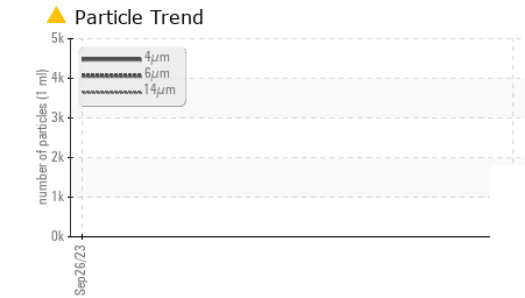
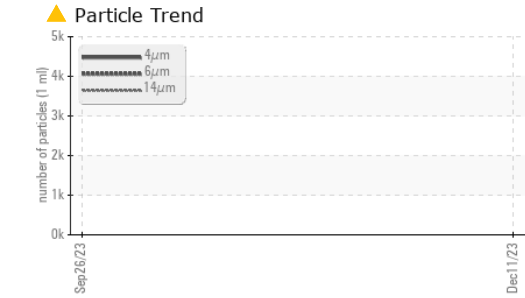
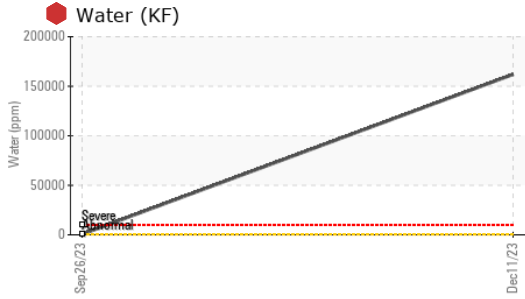
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4332</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>2360</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>402</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>135</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>21</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>2</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/18/16</b>	---	---

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.78</b>	0.20	---

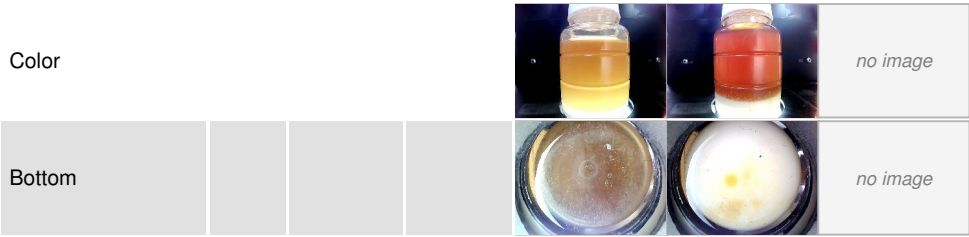
# OIL ANALYSIS REPORT



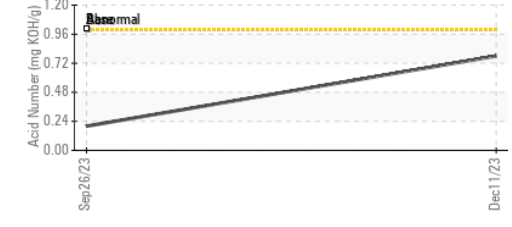
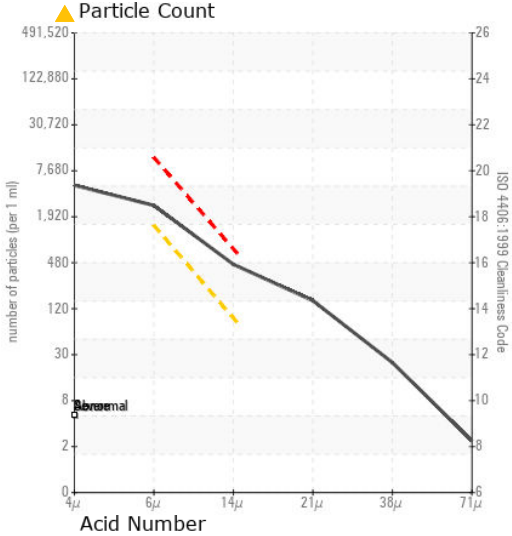
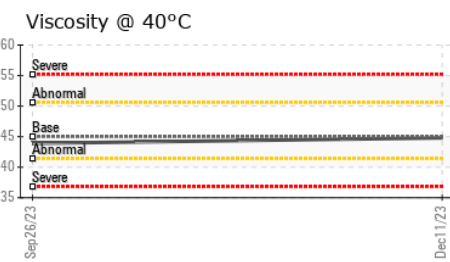
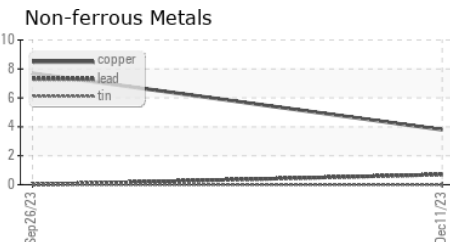
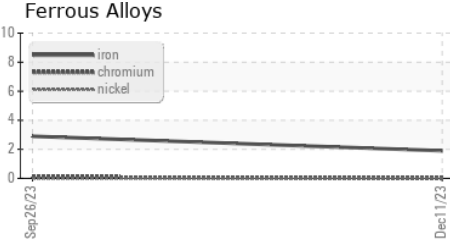
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER
Sand/Dirt	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	>0.05	<b>NEG</b>	▲ 0.2%
Free Water	scalar	*Visual		<b>NEG</b>	▲ 10.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	<b>44.8</b>	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004685 **Received** : 30 Jan 2024  
**Lab Number** : 06073907 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10855998 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**COBB COUNTY MARIETTA WATER AUTHORITY**  
 313 JOHNSON FERRY RD  
 MARIETTA, GA  
 US 30068  
 Contact: J. SCHNALL  
 jschnall@ccmwa.org  
 T:  
 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)