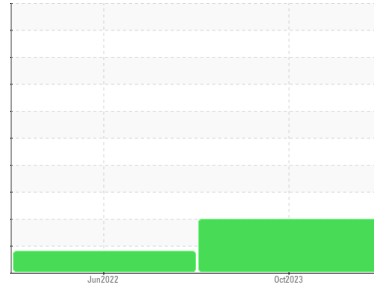


# PROBLEM SUMMARY

Sample Rating Trend



## VISCOSITY

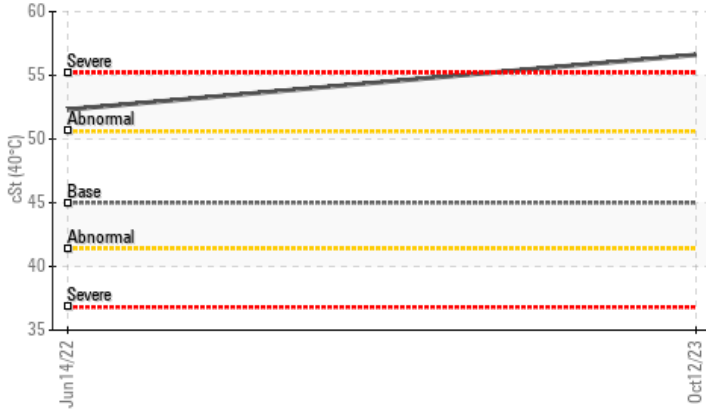


Machine Id  
**KAESER 1777273**

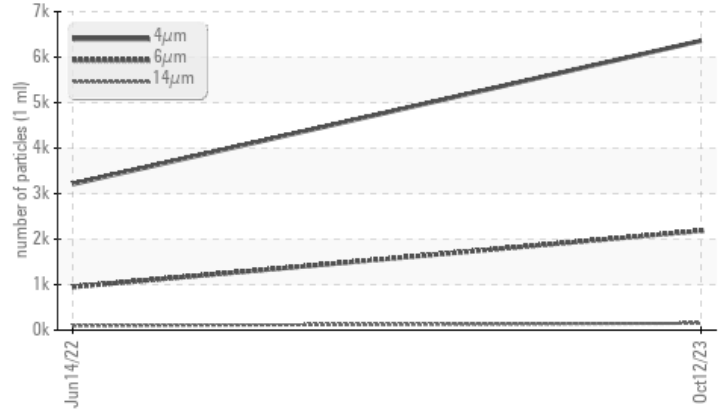
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Particle Trend



### RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ATTENTION	---
Particles >6µm	ASTM D7647	>1300	▲ 2183	950	---
Particles >14µm	ASTM D7647	>80	▲ 152	▲ 96	---
Particles >21µm	ASTM D7647	>20	▲ 28	21	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/14	▲ 19/17/14	---
Visc @ 40°C	cSt	ASTM D445	45	▲ 56.61	52.32

Customer Id: MASRIC  
Sample No.: KCPA006877  
Lab Number: 05997421  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**14 Jun 2022 Diag: Angela Borella**

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

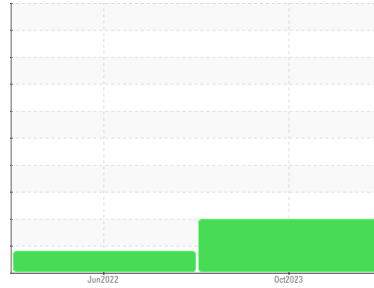
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**KAESER 1777273**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The 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 a moderate amount of particulates present in the oil.

### Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA006877</b>	KCP41390	---
Sample Date	Client Info		<b>12 Oct 2023</b>	14 Jun 2022	---
Machine Age	hrs	Client Info	<b>31400</b>	26887	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	Changed	---
Sample Status			<b>ATTENTION</b>	ATTENTION	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
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>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>3</b>	<1	---
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>	<1	---
Barium	ppm	ASTM D5185m 90	<b>65</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>60</b>	0	---
Calcium	ppm	ASTM D5185m 0	<b>2</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>6</b>	10	---
Zinc	ppm	ASTM D5185m 0	<b>12</b>	16	---
Sulfur	ppm	ASTM D5185m 23500	<b>9928</b>	88	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	---
Sodium	ppm	ASTM D5185m	<b>35</b>	8	---
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	---
Water	%	ASTM D6304 >0.05	<b>0.022</b>	0.001	---
ppm Water	ppm	ASTM D6304 >500	<b>224.8</b>	13.1	---

## FLUID CLEANLINESS

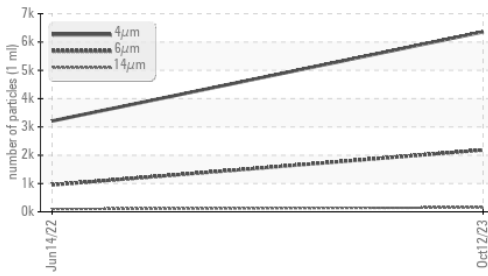
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>6359</b>	3209	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 2183</b>	950	---
Particles >14µm	ASTM D7647	>80	<b>▲ 152</b>	▲ 96	---
Particles >21µm	ASTM D7647	>20	<b>▲ 28</b>	21	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	3	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 20/18/14</b>	▲ 19/17/14	---

## FLUID DEGRADATION

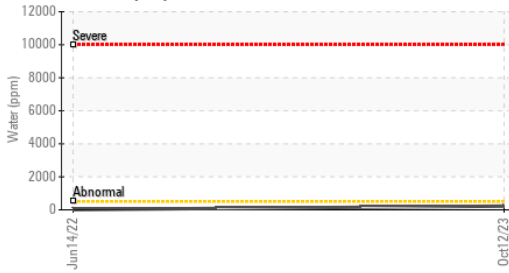
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.27</b>	0.103	---

# OIL ANALYSIS REPORT

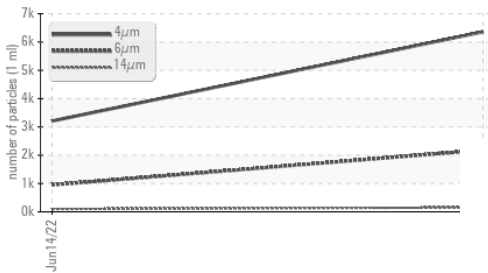
## ▲ Particle Trend



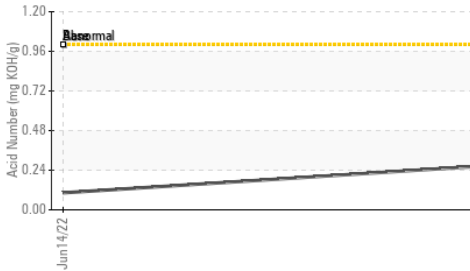
## Water (KF)



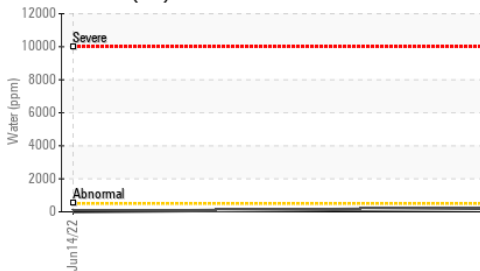
## ▲ Particle Trend



## Acid Number



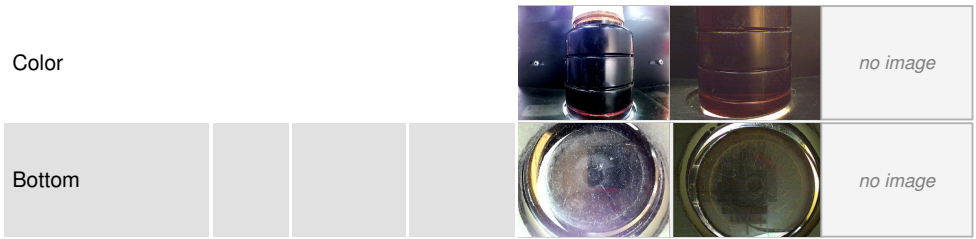
## Water (KF)



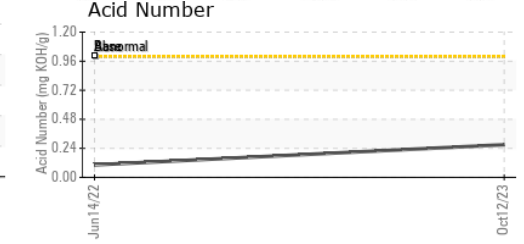
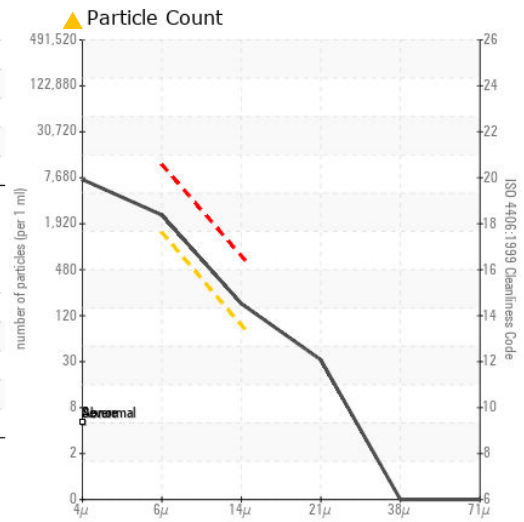
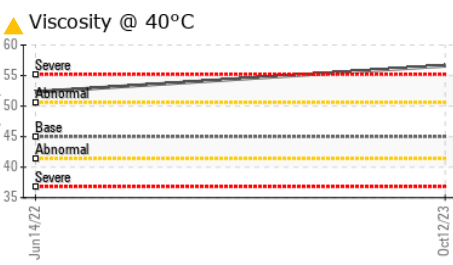
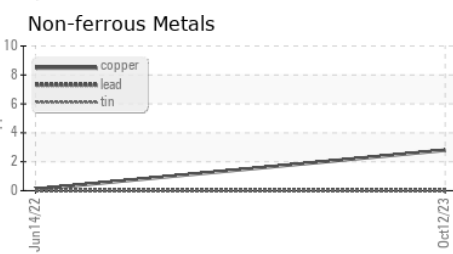
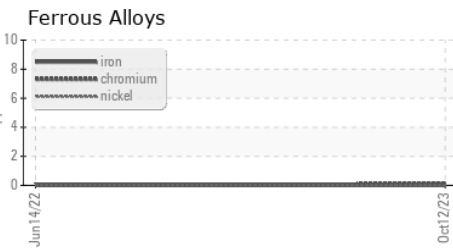
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	▲ 56.61	52.32

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006877 **Received** : 02 Nov 2023  
**Lab Number** : 05997421 **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10725781 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**MASTERCRAFT INDUSTRIES**  
 120 W ALLEN ST  
 RICE LAKE, WI  
 US 54868  
 Contact: Service Manager

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: