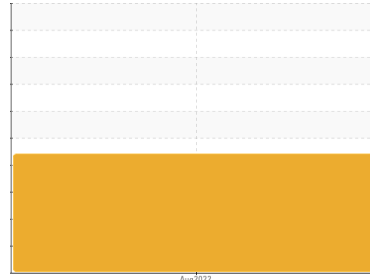


# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

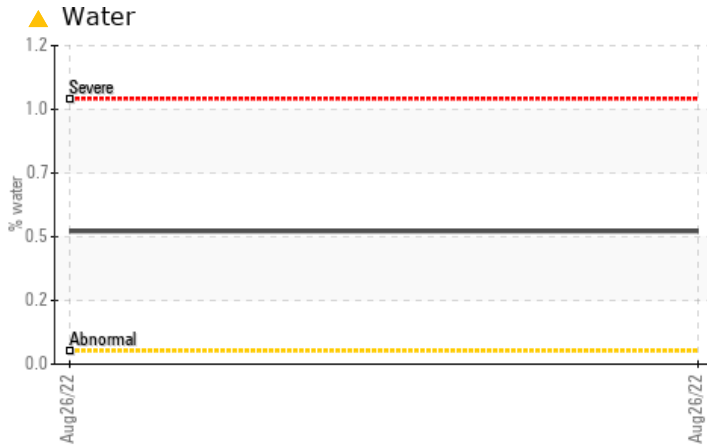


Machine Id  
**9028917 (S/N 1364)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.501</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 5010</b>	---	---
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	---	---
Appearance	scalar	*Visual	NORML	<b>▲ HAZY</b>	---	---
Free Water	scalar	*Visual		<b>▲ 1.0</b>	---	---

**Customer Id:** TONBAR  
**Sample No.:** KCP28685  
**Lab Number:** 05646570  
**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)

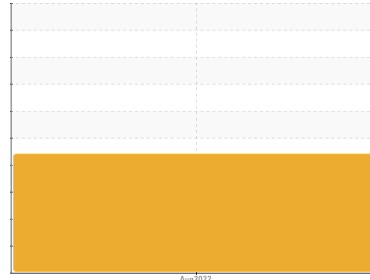
## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**9028917 (S/N 1364)**

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

## DIAGNOSIS

### ▲ Recommendation

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.

### Wear

All component wear rates are normal.

### ▲ Contamination

Appearance is hazy. Free water present. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present 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	history 1	history 2
Sample Number			<b>KCP28685</b>	---	---
Sample Date			<b>26 Aug 2022</b>	---	---
Machine Age	hrs		<b>1474</b>	---	---
Oil Age	hrs		<b>1474</b>	---	---
Oil Changed			<b>Not Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>&lt;1</b>	---	---
Chromium	ppm ASTM D5185m	>10	<b>0</b>	---	---
Nickel	ppm ASTM D5185m	>3	<b>0</b>	---	---
Titanium	ppm ASTM D5185m	>3	<b>0</b>	---	---
Silver	ppm ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m	>10	<b>&lt;1</b>	---	---
Lead	ppm ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm ASTM D5185m	>50	<b>8</b>	---	---
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m	0	<b>0</b>	---	---
Barium	ppm ASTM D5185m	90	<b>7</b>	---	---
Molybdenum	ppm ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m	100	<b>38</b>	---	---
Calcium	ppm ASTM D5185m	0	<b>1</b>	---	---
Phosphorus	ppm ASTM D5185m	0	<b>3</b>	---	---
Zinc	ppm ASTM D5185m	0	<b>8</b>	---	---
Sulfur	ppm ASTM D5185m	23500	<b>20612</b>	---	---

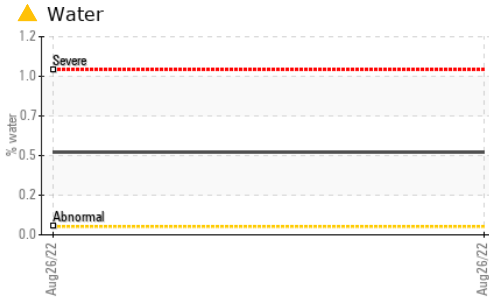
## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>3</b>	---	---
Sodium	ppm ASTM D5185m		<b>4</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>0</b>	---	---
Water	% ASTM D6304	>0.05	<b>▲ 0.501</b>	---	---
ppm Water	ppm ASTM D6304	>500	<b>▲ 5010</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.0	<b>0.41</b>	---	---

# OIL ANALYSIS REPORT



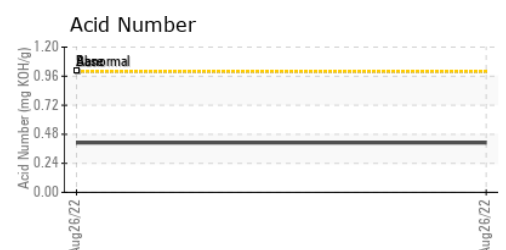
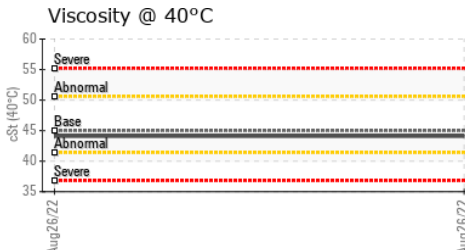
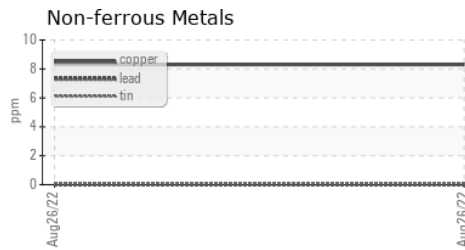
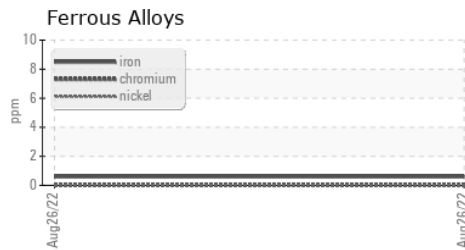
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	▲ HAZY	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	---
Free Water	scalar	*Visual		▲ 1.0	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	44.1	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
---------------	--------	------------	---------	-----------	-----------

Color				no image	no image
Bottom				no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP28685 **Received** : 20 Sep 2022  
**Lab Number** : 05646570 **Diagnosed** : 21 Sep 2022  
**Unique Number** : 10141109 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**TONWOOD BREWING**  
 50 CLEMENTS BRIDGE RD  
 BARRINGTON, NJ  
 USA 08007  
 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: