

# PROBLEM SUMMARY

Sample Rating Trend

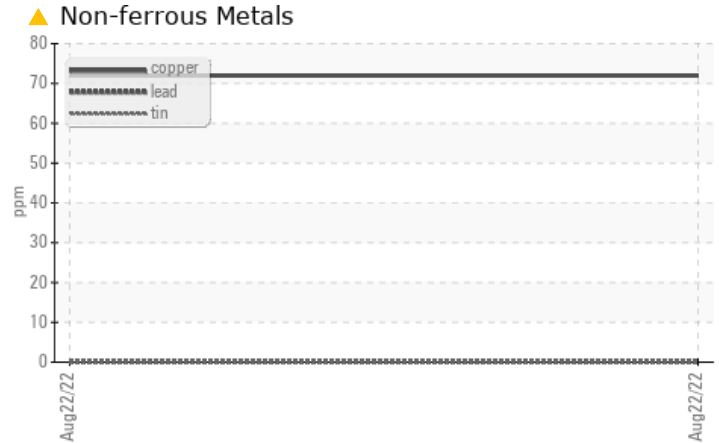
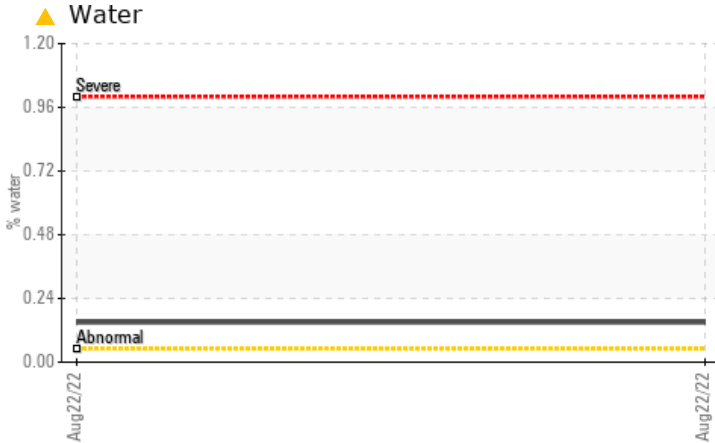


**WATER**



Machine Id  
**KAESER AIRTOWER 5C 5927095 (S/N 1085)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>▲ 72</b>	---	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.150</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 1500</b>	---	---

Customer Id: HAMSOU  
Sample No.: KCP50026  
Lab Number: 05638596  
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)

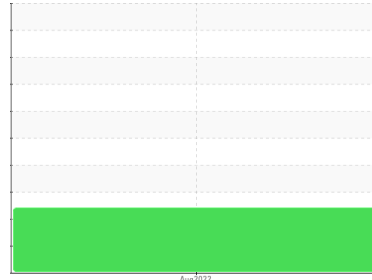
## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**

Machine Id  
**KAESER AIRTOWER 5C 5927095 (S/N 1085)**

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

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

### ▲ Wear

The copper level is abnormal. All other component wear rates are normal.

### ▲ Contamination

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

### 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>KCP50026</b>	---	---
Sample Date			<b>22 Aug 2022</b>	---	---
Machine Age	hrs		<b>4738</b>	---	---
Oil Age	hrs		<b>4738</b>	---	---
Oil Changed			<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>0</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>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185m	>10	<b>1</b>	---	---
Lead	ppm ASTM D5185m	>10	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185m	>50	<b>▲ 72</b>	---	---
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>&lt;1</b>	---	---

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m	0	<b>0</b>	---	---
Barium	ppm ASTM D5185m	90	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm ASTM D5185m	100	<b>&lt;1</b>	---	---
Calcium	ppm ASTM D5185m	0	<b>0</b>	---	---
Phosphorus	ppm ASTM D5185m	0	<b>10</b>	---	---
Zinc	ppm ASTM D5185m	0	<b>0</b>	---	---
Sulfur	ppm ASTM D5185m	23500	<b>13690</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>2</b>	---	---
Sodium	ppm ASTM D5185m		<b>0</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>&lt;1</b>	---	---
Water	% ASTM D6304	>0.05	<b>▲ 0.150</b>	---	---
ppm Water	ppm ASTM D6304	>500	<b>▲ 1500</b>	---	---

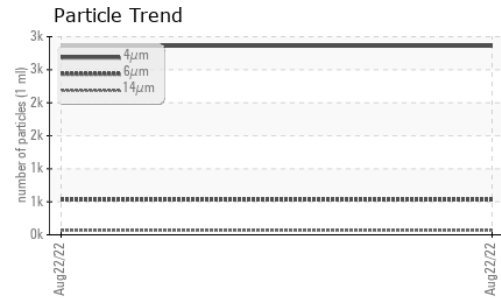
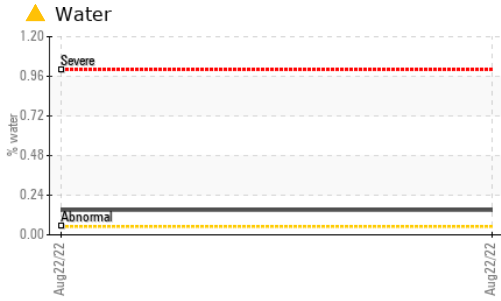
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>2859</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>531</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>68</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>13</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/16/13</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.0	<b>0.36</b>	---	---

# OIL ANALYSIS REPORT



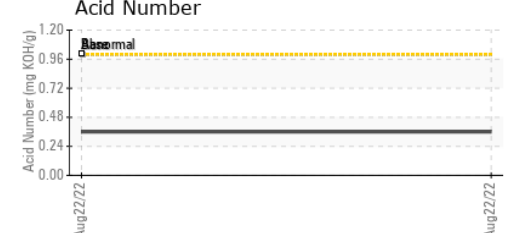
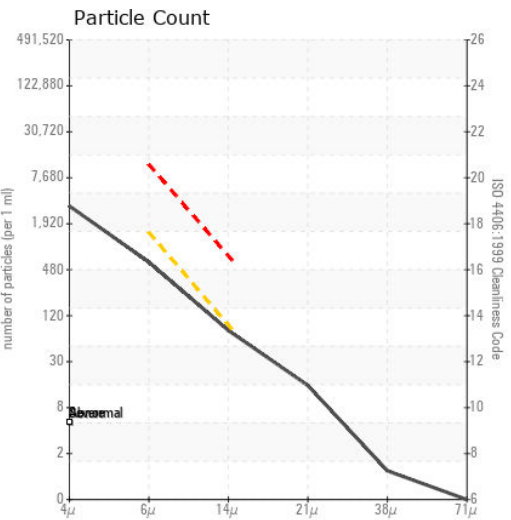
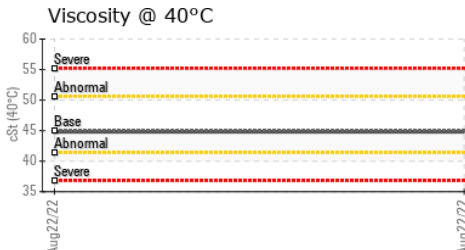
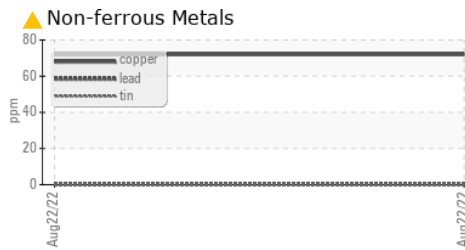
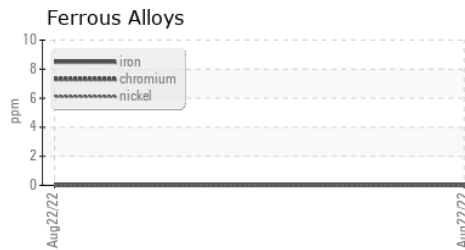
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	VLITE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	44.8	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP50026 **Received** : 12 Sep 2022  
**Lab Number** : 05638596 **Diagnosed** : 15 Sep 2022  
**Unique Number** : 10128126 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**HAMILTON BEACH/PROCTOR SILEX INC**  
 261 YADKIN RD  
 SOUTHERN PINES, NC  
 USA 28387  
 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: