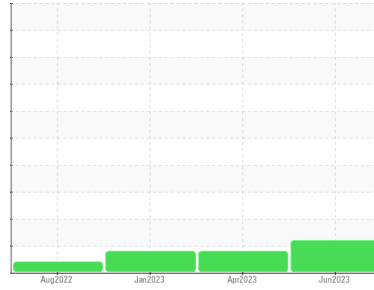




# PROBLEM SUMMARY

Sample Rating Trend



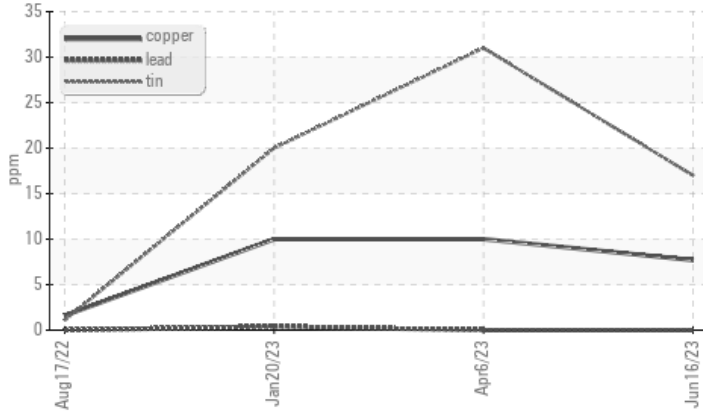
**WEAR**



Machine Id  
**KAESER CSD 100S 8540476 (S/N 1155)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



## 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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Tin	ppm	ASTM D5185m	>10	▲ 17	▲ 31	▲ 20
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	LIGHT

Customer Id: SILNEW  
 Sample No.: KC123005  
 Lab Number: 05880917  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

### 06 Apr 2023 Diag: Don Baldrige

#### WEAR



Resample at the next service interval to monitor. The tin level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 20 Jan 2023 Diag: Don Baldrige

#### WEAR



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count on this sample. The tin level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 17 Aug 2022 Diag: Angela Borella

#### VIS DEBRIS



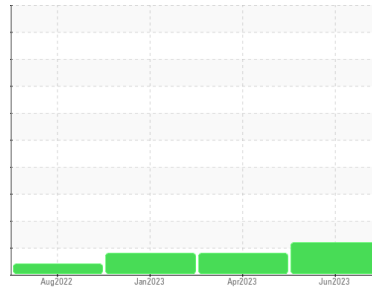
Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**KAESER CSD 100S 8540476 (S/N 1155)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### ▲ Wear

The tin level has decreased, but is still abnormal. All other component wear rates are normal.

### ▲ Contamination

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	history1	history2
Sample Number	Client Info	<b>KC123005</b>	KC112468	KC106878
Sample Date	Client Info	<b>16 Jun 2023</b>	06 Apr 2023	20 Jan 2023
Machine Age	hrs	<b>6998</b>	6061	4241
Oil Age	hrs	<b>0</b>	5500	4241
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Not Changd
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >50	<b>0</b>	0	0
Chromium ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium ppm	ASTM D5185m >3	<b>1</b>	0	0
Silver ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum ppm	ASTM D5185m >10	<b>0</b>	4	0
Lead ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper ppm	ASTM D5185m >50	<b>8</b>	10	10
Tin ppm	ASTM D5185m >10	<b>▲ 17</b>	<b>▲ 31</b>	<b>▲ 20</b>
Vanadium ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	<b>0</b>	0	0
Barium ppm	ASTM D5185m 90	<b>0</b>	2	0
Molybdenum ppm	ASTM D5185m	<b>0</b>	<1	0
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium ppm	ASTM D5185m 90	<b>0</b>	2	<1
Calcium ppm	ASTM D5185m 2	<b>0</b>	<1	0
Phosphorus ppm	ASTM D5185m	<b>2</b>	2	0
Zinc ppm	ASTM D5185m	<b>0</b>	8	12

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	<b>4</b>	5	3
Sodium ppm	ASTM D5185m	<b>4</b>	1	<1
Potassium ppm	ASTM D5185m >20	<b>4</b>	<1	0
Water %	ASTM D6304 >0.05	<b>0.007</b>	0.006	0.009
ppm Water	ASTM D6304 >500	<b>75.2</b>	64.1	92.5

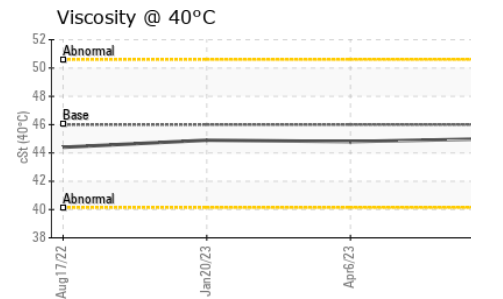
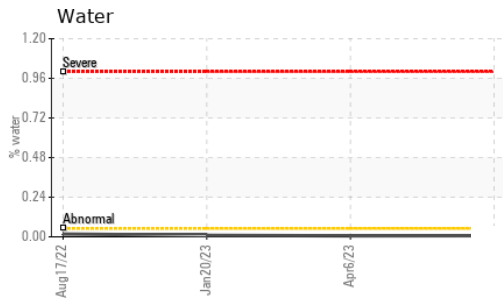
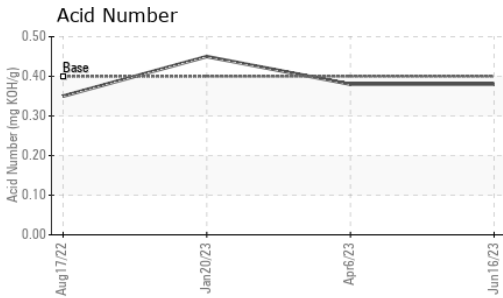
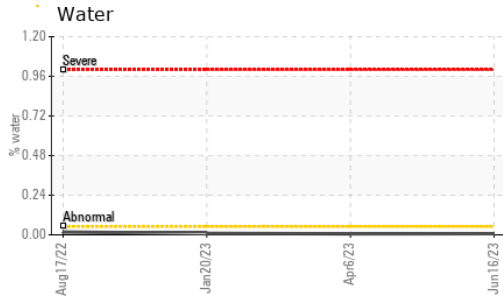
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>---</b>	2520	---
Particles >6µm	ASTM D7647 >1300	<b>---</b>	820	---
Particles >14µm	ASTM D7647 >80	<b>---</b>	66	---
Particles >21µm	ASTM D7647 >20	<b>---</b>	20	---
Particles >38µm	ASTM D7647 >4	<b>---</b>	4	---
Particles >71µm	ASTM D7647 >3	<b>---</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>---</b>	19/17/13	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 0.4	<b>0.38</b>	0.38	0.45

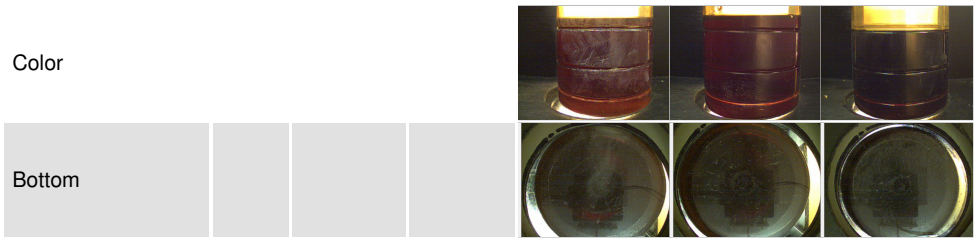
# OIL ANALYSIS REPORT



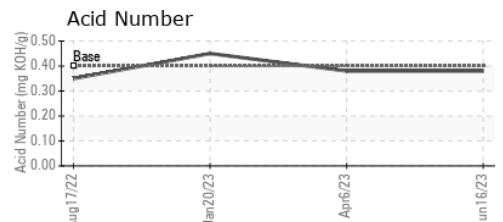
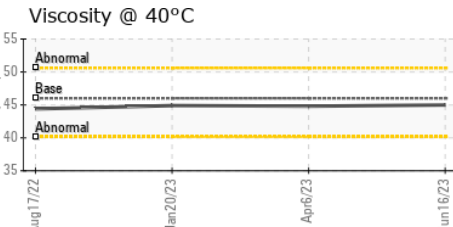
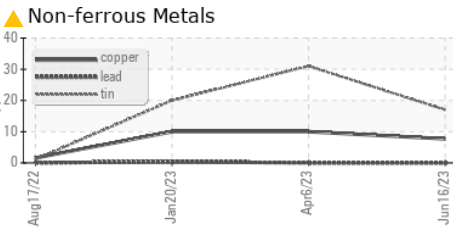
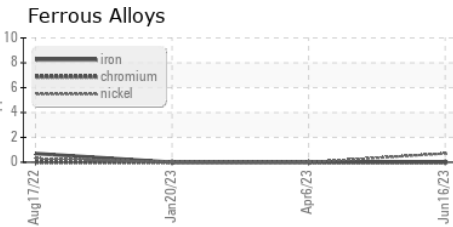
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	45.0	44.8	44.9

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.** : KC123005 **Received** : 22 Jun 2023  
**Lab Number** : 05880917 **Diagnosed** : 26 Jun 2023  
**Unique Number** : 10526020 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**SILVERLINE BUILDING PRODUCTS**  
 1 SILVERLINE  
 NEW BRUNSWICK, NJ  
 US 08902  
 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: