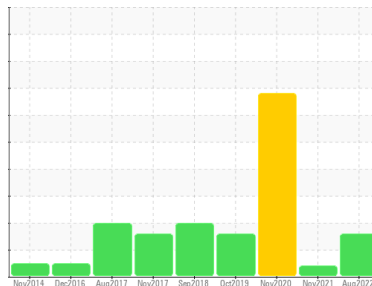


# PROBLEM SUMMARY

Sample Rating Trend



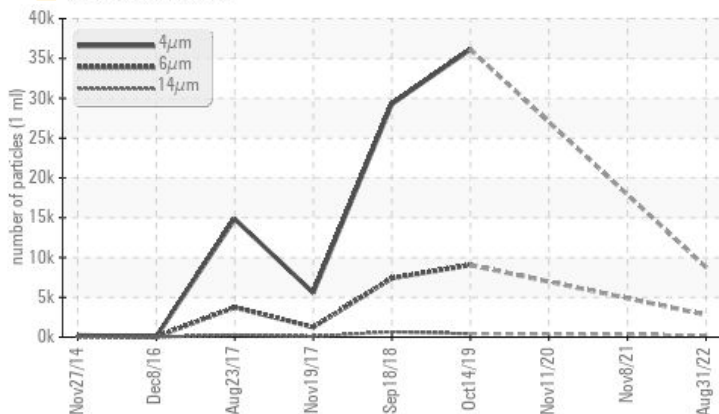
Machine Id  
**KAESER CSD 75 AC-112 - 4823832 (S/N 1243)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-460 (--- LTR)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	SEVERE
Particles >6µm	ASTM D7647	>1300	▲ 2800	---	---
Particles >14µm	ASTM D7647	>80	▲ 258	---	---
Particles >21µm	ASTM D7647	>20	▲ 43	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	---	---

Customer Id: EASLYOKC  
Sample No.: KC102961  
Lab Number: 05632388  
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
Change Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 08 Nov 2021 Diag: Doug Bogart

#### VIS DEBRIS



We recommend you service the filters on this component. 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 suitable for further service.

view report



### 11 Nov 2020 Diag: Jonathan Hester

#### WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend you service the filters on this component. We recommend an early resample in 500 hours to monitor this condition. 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. Free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 14 Oct 2019 Diag: Jonathan Hester

#### ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

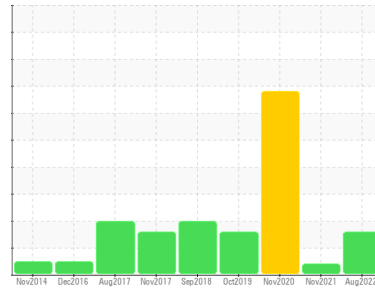
view report



Machine Id  
**KAESER CSD 75 AC-112 - 4823832 (S/N 1243)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-460 (--- LTR)**



## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates 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>KC102961</b>	KC98366	KC88156
Sample Date			<b>31 Aug 2022</b>	08 Nov 2021	11 Nov 2020
Machine Age	hrs		<b>18065</b>	16156	14079
Oil Age	hrs		<b>0</b>	2078	1919
Oil Changed			<b>Not Changed</b>	N/A	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

	method	limit/base	current	history 1	history 2
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>0</b>	0	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	2
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>9</b>	12	11
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>0</b>	0	2
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>1</b>	0	3
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.05	<b>0.008</b>	0.008	▲ 0.384
ppm Water	ppm	ASTM D6304 >500	<b>83.9</b>	82.5	▲ 3840

## FLUID CLEANLINESS

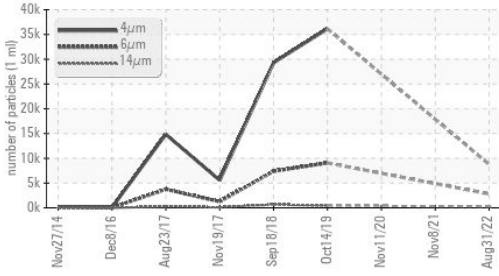
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>8776</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>2800</b>	---	---
Particles >14µm	ASTM D7647	>80	▲ <b>258</b>	---	---
Particles >21µm	ASTM D7647	>20	▲ <b>43</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/19/15</b>	---	---

## FLUID DEGRADATION

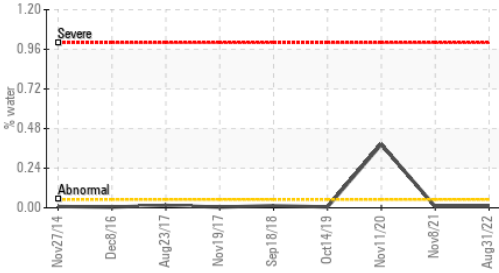
	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.44</b>	0.381	0.372

# OIL ANALYSIS REPORT

## ▲ Particle Trend



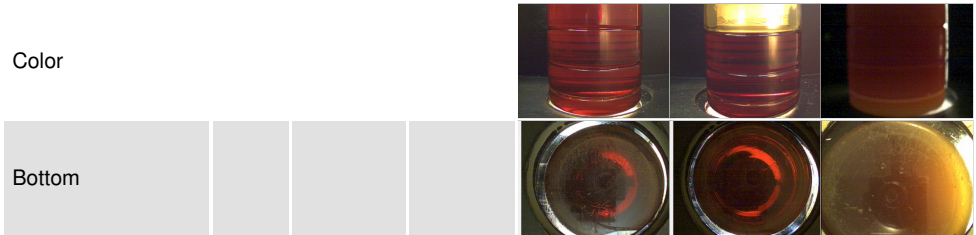
## Water



VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	<b>▲ MODER</b>
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	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	<b>1.0</b>

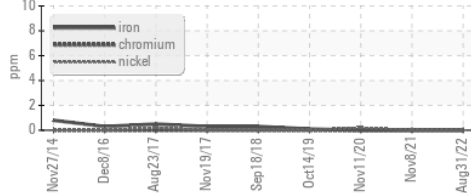
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	<b>44.3</b>	44.6

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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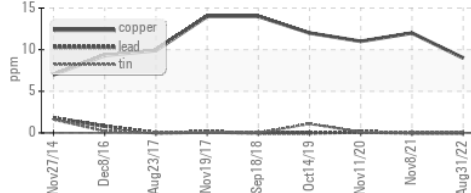


## GRAPHS

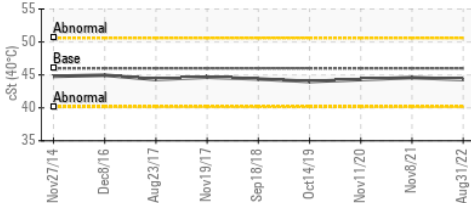
### Ferrous Alloys



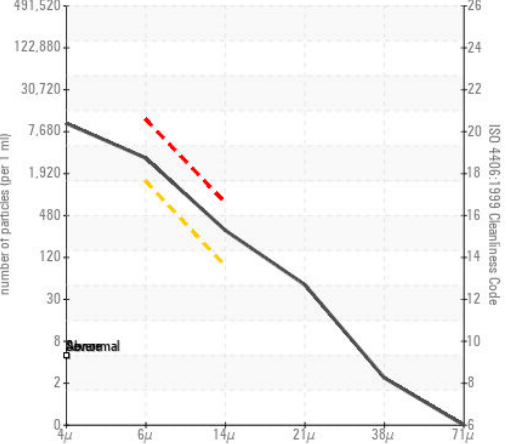
### Non-ferrous Metals



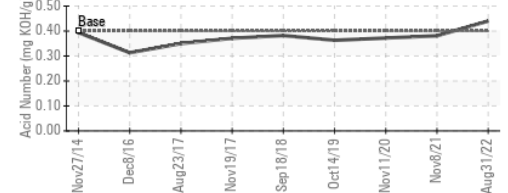
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC102961 **Received** : 01 Sep 2022  
**Lab Number** : 05632388 **Diagnosed** : 03 Sep 2022  
**Unique Number** : 10116909 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**EAST PENN MANUFACTURING**  
 102 DEKA RD  
 LYON STATION, PA  
 USA 19536  
 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: