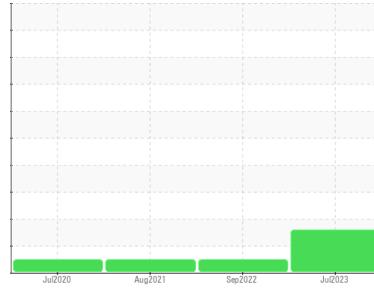




# PROBLEM SUMMARY

Sample Rating Trend

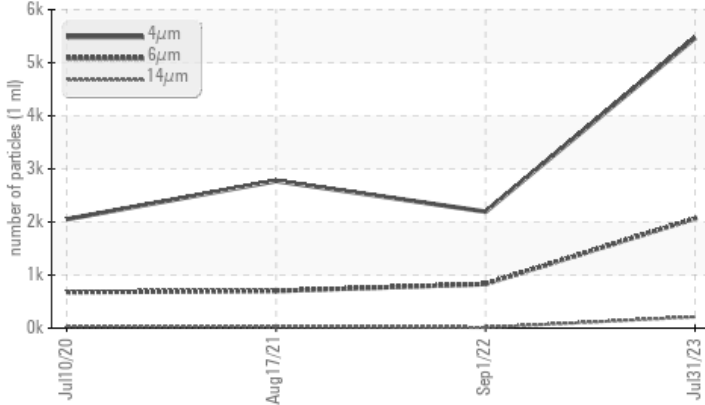


Machine Id  
**KAESER 6810570**

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

## 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	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 2065	831	701
Particles >14µm	ASTM D7647	>80	▲ 213	13	29
Particles >21µm	ASTM D7647	>20	▲ 50	1	9
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/15	18/17/11	17/12

Customer Id: UNISOFLO  
Sample No.: KC122712  
Lab Number: 05932753  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@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 Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 01 Sep 2022 Diag: Angela Borella

NORMAL



No corrective action is recommended at this time. 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. 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



### 17 Aug 2021 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All 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



### 10 Jul 2020 Diag: Angela Borella

NORMAL



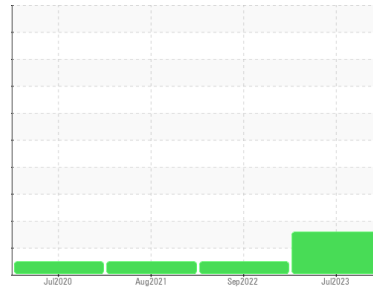
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER 6810570**

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

## 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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KC122712</b>	KC98902	KC94279
Sample Date	Client Info		<b>31 Jul 2023</b>	01 Sep 2022	17 Aug 2021
Machine Age	hrs	Client Info	<b>8293</b>	5260	3505
Oil Age	hrs	Client Info	<b>0</b>	2755	2400
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>5</b>	4	8
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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	<1
Barium	ppm	ASTM D5185m 90	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>33</b>	48	35
Calcium	ppm	ASTM D5185m 2	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>4</b>	2	0
Zinc	ppm	ASTM D5185m	<b>0</b>	4	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>12</b>	14	9
Potassium	ppm	ASTM D5185m >20	<b>3</b>	3	3
Water	%	ASTM D6304 >0.05	<b>0.021</b>	0.024	0.024
ppm Water	ppm	ASTM D6304 >500	<b>211.9</b>	240.8	246.6

## FLUID CLEANLINESS

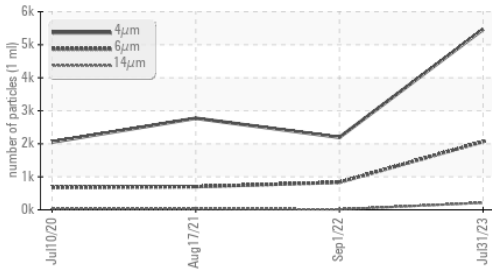
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>5465</b>	2194	2773
Particles >6µm	ASTM D7647	>1300	<b>▲ 2065</b>	831	701
Particles >14µm	ASTM D7647	>80	<b>▲ 213</b>	13	29
Particles >21µm	ASTM D7647	>20	<b>▲ 50</b>	1	9
Particles >38µm	ASTM D7647	>4	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 20/18/15</b>	18/17/11	17/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.33</b>	0.35	0.318

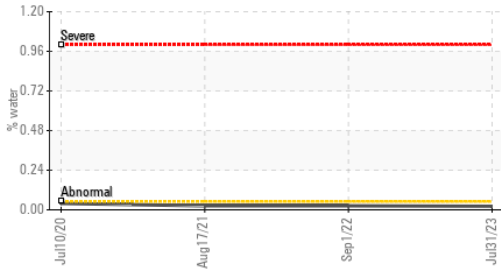
# OIL ANALYSIS REPORT

## ▲ Particle Trend



VISUAL	method	limit/base	current	history1	history2
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	NONE	NONE
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

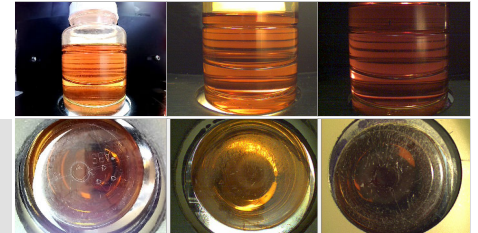
## Water



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	43.8	44.2

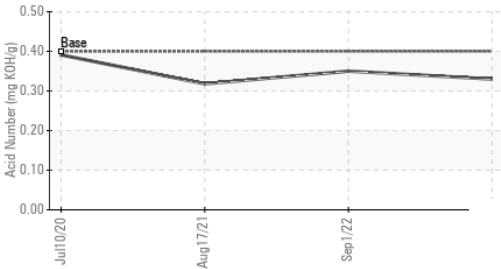
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



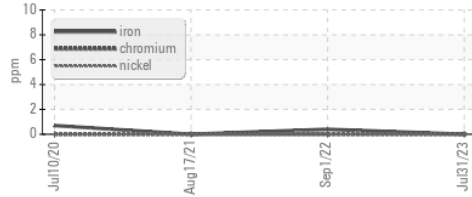
Bottom

## Acid Number

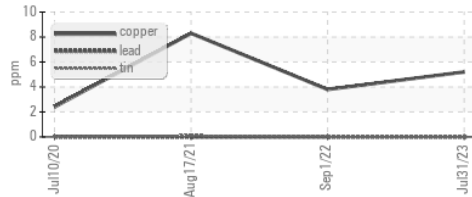


## GRAPHS

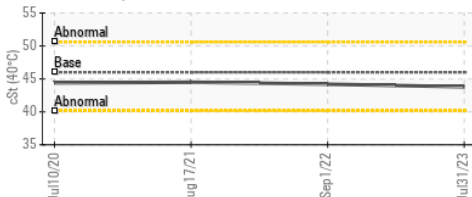
### Ferrous Alloys



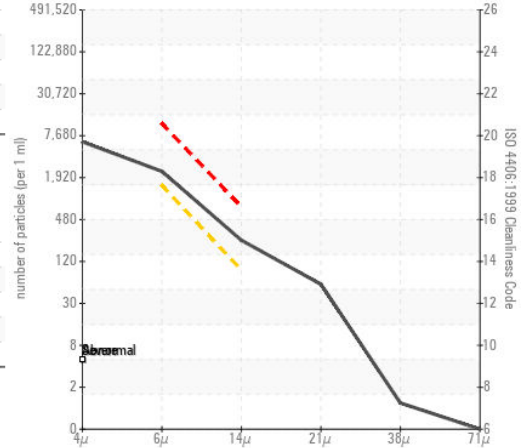
### Non-ferrous Metals



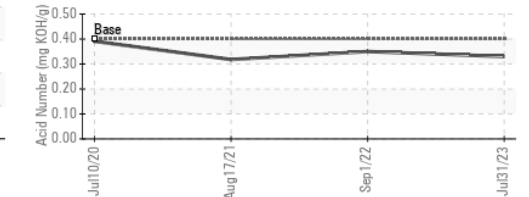
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KC122712  
 Lab Number : 05932753  
 Unique Number : 10618024  
 Test Package : IND 2

Received : 23 Aug 2023  
 Diagnosed : 25 Aug 2023  
 Diagnostician : Angela Borella

**UNIVERSITY OF SOUTH FLORIDA**  
 3802 SPECTRUM BLVD, SUITE 100  
 TAMPA, FL  
 US 33612  
 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: