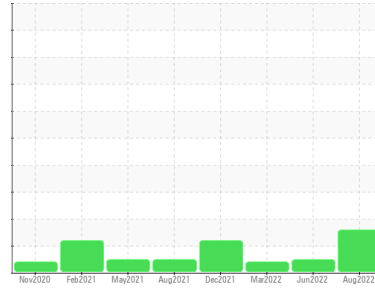




Machine Id  
**KAESER AS 20 6521559 (S/N 1098)**

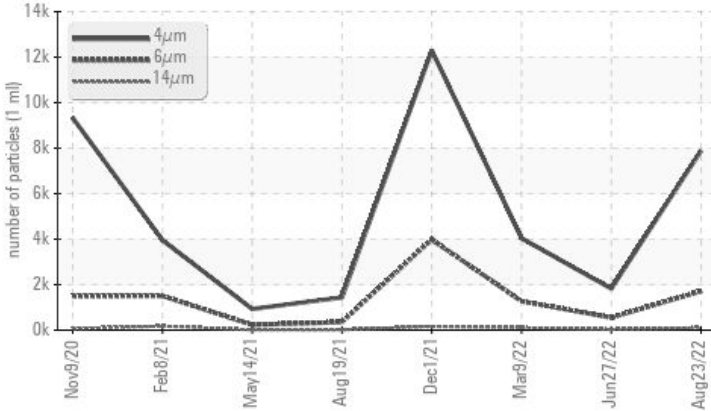
Component  
**Compressor**

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



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	ATTENTION
Particles >6µm	ASTM D7647	>1300	▲ 1716	552	1270
Particles >14µm	ASTM D7647	>80	▲ 108	30	▲ 107
Particles >21µm	ASTM D7647	>20	▲ 34	7	20
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/14	18/16/12	▲ 17/14

Customer Id: NORHIGKC  
Sample No.: KC95204  
Lab Number: 05628379  
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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 27 Jun 2022 Diag: Don Baldrige

NORMAL



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. 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



### 09 Mar 2022 Diag: Jonathan Hester

ISO



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. There is a moderate 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



### 01 Dec 2021 Diag: Doug Bogart

ISO



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. 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

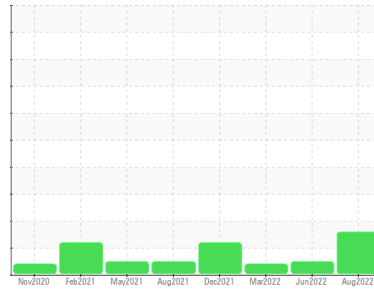




Machine Id  
**KAESER AS 20 6521559 (S/N 1098)**

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.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate 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>KC95204</b>	KC95209	KC96485
Sample Date			<b>23 Aug 2022</b>	27 Jun 2022	09 Mar 2022
Machine Age	hrs		<b>29419</b>	28398	26269
Oil Age	hrs		<b>3200</b>	2129	1988
Oil Changed			<b>Not Chngd</b>	Not Chngd	Changed
Sample Status			<b>ATTENTION</b>	NORMAL	ATTENTION

## 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>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>11</b>	10	5
Tin	ppm	ASTM D5185m >10	<b>1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	4	5
Zinc	ppm	ASTM D5185m	<b>11</b>	3	0

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	2	4
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.05	<b>0.007</b>	0.010	0.005
ppm Water	ppm	ASTM D6304 >500	<b>75.9</b>	100.1	53.2

## FLUID CLEANLINESS

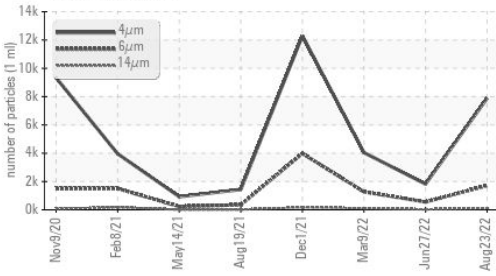
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>7885</b>	1823	4043
Particles >6µm	ASTM D7647	>1300	<b>▲ 1716</b>	552	1270
Particles >14µm	ASTM D7647	>80	<b>▲ 108</b>	30	▲ 107
Particles >21µm	ASTM D7647	>20	<b>▲ 34</b>	7	20
Particles >38µm	ASTM D7647	>4	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 20/18/14</b>	18/16/12	▲ 17/14

## FLUID DEGRADATION

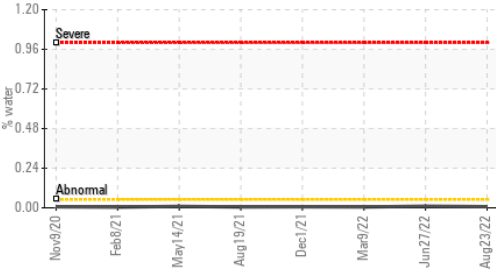
	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.36</b>	0.30	0.37

# OIL ANALYSIS REPORT

## ▲ Particle Trend



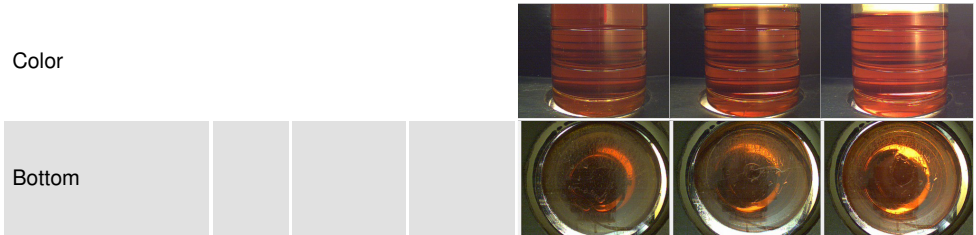
## Water



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	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

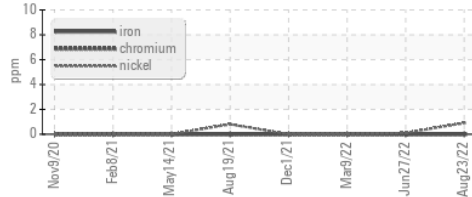
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	44.0	40.9	44.0

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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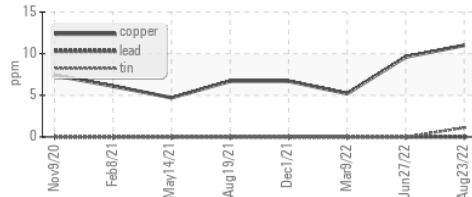


## GRAPHS

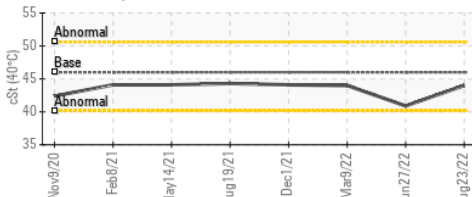
### Ferrous Alloys



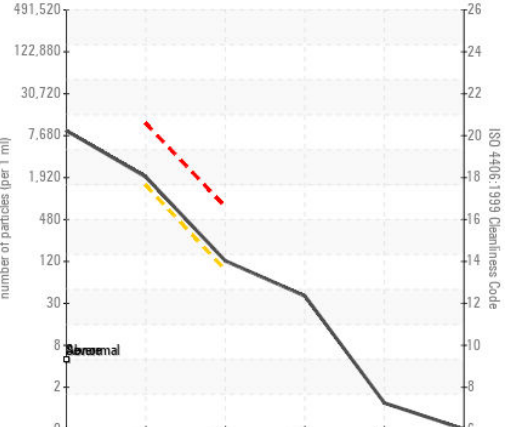
### Non-ferrous Metals



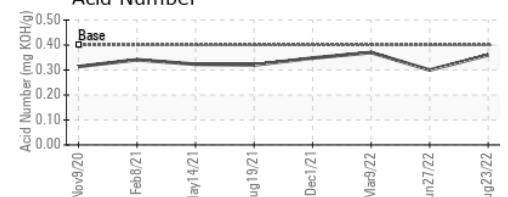
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC95204 **Received** : 26 Aug 2022  
**Lab Number** : 05628379 **Diagnosed** : 30 Aug 2022  
**Unique Number** : 10112900 **Diagnostician** : Angela Borella  
**Test Package** : IND 2

**NORMAN NOBLE**  
 5340 AVION PKWY  
 HIGHLAND HEIGHTS, OH  
 USA 44143  
 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: