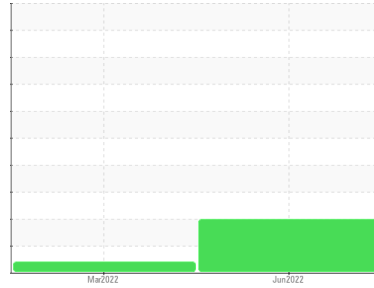




# PROBLEM SUMMARY

Sample Rating Trend



ISO

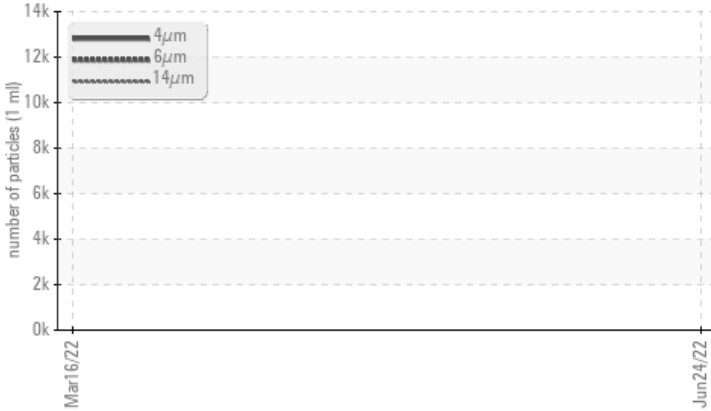


Machine Id  
**7992912 (S/N 1012)**

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

## 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			<b>ABNORMAL</b>	ABNORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ <b>6001</b>	---	---
Particles >14µm	ASTM D7647	>80	▲ <b>1001</b>	---	---
Particles >21µm	ASTM D7647	>20	▲ <b>329</b>	---	---
Particles >38µm	ASTM D7647	>4	▲ <b>18</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/20/17</b>	---	---

Customer Id: GRAGREKCP  
Sample No.: KCP44297  
Lab Number: 05586807  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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	MISSED	Jan 18 2023	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 16 Mar 2022 Diag: Don Baldrige

#### VIS DEBRIS



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. 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.

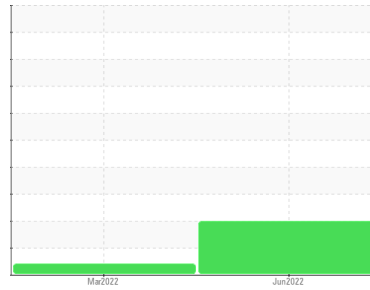
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**7992912 (S/N 1012)**

Component  
**Compressor**

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

## 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	history1	history2
Sample Number	Client Info			<b>KCP44297</b>	KCP44664	---
Sample Date	Client Info			<b>24 Jun 2022</b>	16 Mar 2022	---
Machine Age	hrs	Client Info		<b>3471</b>	2209	---
Oil Age	hrs	Client Info		<b>3471</b>	2209	---
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>3</b>	3	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>3</b>	2	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>3</b>	2	---
Barium	ppm	ASTM D5185m	90	<b>79</b>	83	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Magnesium	ppm	ASTM D5185m	90	<b>80</b>	89	---
Calcium	ppm	ASTM D5185m	2	<b>4</b>	2	---
Phosphorus	ppm	ASTM D5185m		<b>&lt;1</b>	3	---
Zinc	ppm	ASTM D5185m		<b>5</b>	0	---
Sulfur	ppm	ASTM D5185m		<b>18909</b>	15744	---

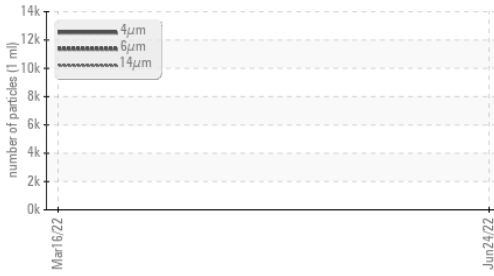
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>14</b>	12	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	---
Water	%	ASTM D6304	>0.05	<b>0.033</b>	0.017	---
ppm Water	ppm	ASTM D6304	>500	<b>333.4</b>	170.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>13214</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 6001</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 1001</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 329</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>▲ 18</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 21/20/17</b>	---	---

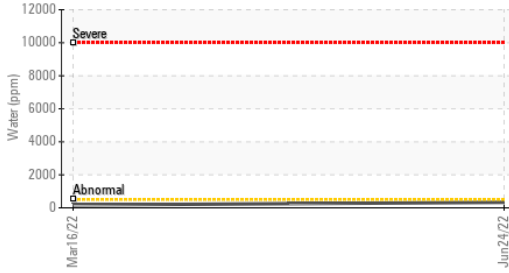
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.32</b>	0.34	---

# OIL ANALYSIS REPORT

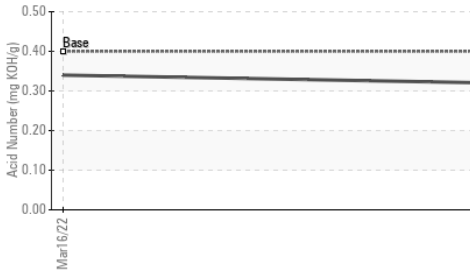
## ▲ Particle Trend



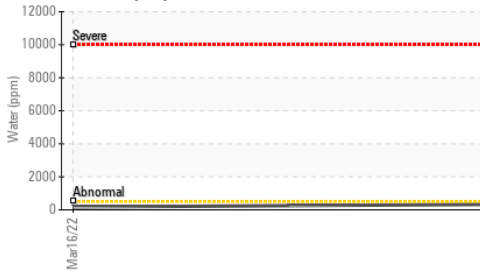
## Water (KF)



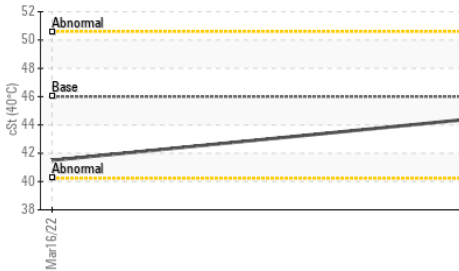
## Acid Number



## Water (KF)



## Viscosity @ 40°C

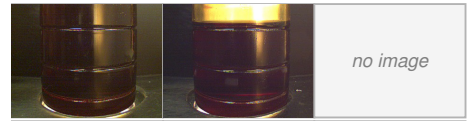


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>LIGHT</b>	NONE	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual NONE	<b>NONE</b>	▲ MODER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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	<b>44.5</b>	41.5	---

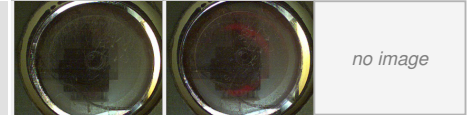
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



no image

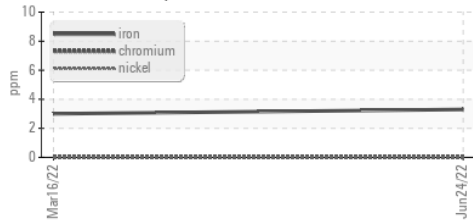
Bottom



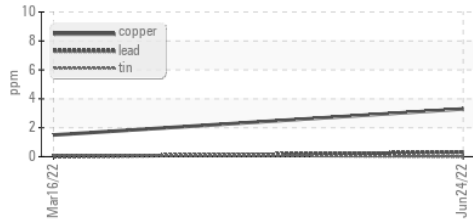
no image

## GRAPHS

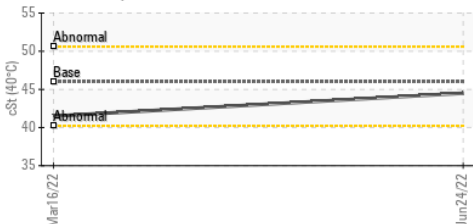
### Ferrous Alloys



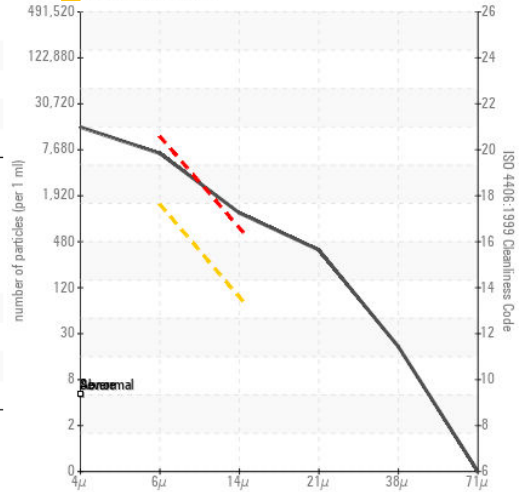
### Non-ferrous Metals



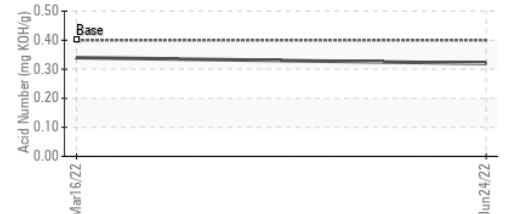
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP44297 **Received** : 08 Jul 2022  
**Lab Number** : 05586807 **Diagnosed** : 11 Jul 2022  
**Unique Number** : 10046254 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**GRADY WHITE BOATS INC**  
 5121 MARTIN LUTHER KING JR HWY  
 GREENVILLE, NC  
 US 27834  
 Contact: J. TYSON  
 jtyson@gradywhite.com

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: