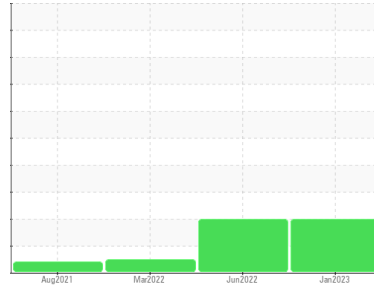


# PROBLEM SUMMARY

Sample Rating Trend



ISO



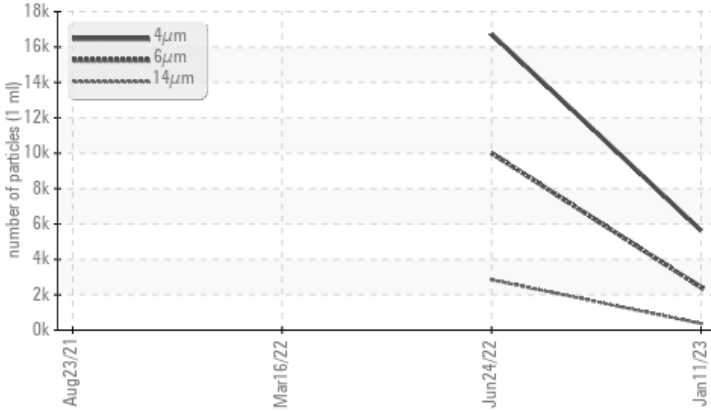
Machine Id  
**7187494 (S/N 1027)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ASTM D7647	ABNORMAL	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>2422</b>	▲ 10007	---
Particles >14µm	ASTM D7647	>80	▲ <b>374</b>	▲ 2845	---
Particles >21µm	ASTM D7647	>20	▲ <b>106</b>	▲ 1221	---
Particles >38µm	ASTM D7647	>4	▲ <b>11</b>	▲ 99	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/18/16</b>	▲ 21/21/19	---

Customer Id: GRAGREKCP  
Sample No.: KCP47995D  
Lab Number: 05741465  
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 Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 24 Jun 2022 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



### 16 Mar 2022 Diag: Don Baldrige

NORMAL



Oil and 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. All 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



### 23 Aug 2021 Diag: Jonathan Hester

VIS DEBRIS



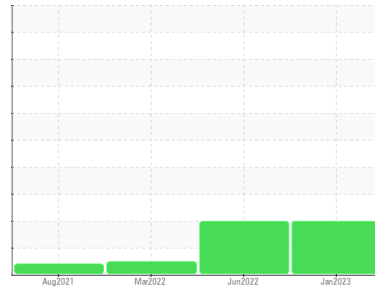
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris 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  
**7187494 (S/N 1027)**

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

**DIAGNOSIS**

**Recommendation**

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.

**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>KCP47995D</b>	KCP44144	KCP45326
Sample Date	Client Info	<b>11 Jan 2023</b>	24 Jun 2022	16 Mar 2022
Machine Age	hrs	<b>9868</b>	7408	6140
Oil Age	hrs	<b>3728</b>	4718	3450
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changd
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>1</b>	<1	<1
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	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>8</b>	2	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
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	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	3	2
Barium	ppm	ASTM D5185m 90	<b>69</b>	85	83
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>90</b>	84	88
Calcium	ppm	ASTM D5185m 2	<b>1</b>	4	2
Phosphorus	ppm	ASTM D5185m	<b>20</b>	<1	3
Zinc	ppm	ASTM D5185m	<b>0</b>	1	0
Sulfur	ppm	ASTM D5185m	<b>21751</b>	19512	16242

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>23</b>	17	13
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	<1
Water	%	ASTM D6304 >0.05	<b>0.021</b>	0.030	0.024
ppm Water	ppm	ASTM D6304 >500	<b>218.1</b>	308.0	249.0

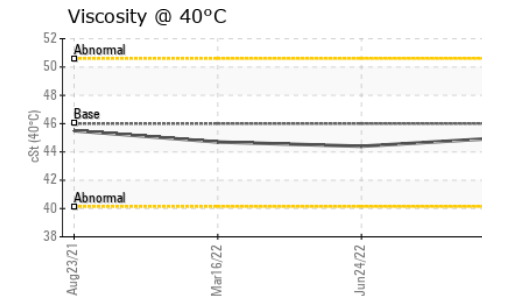
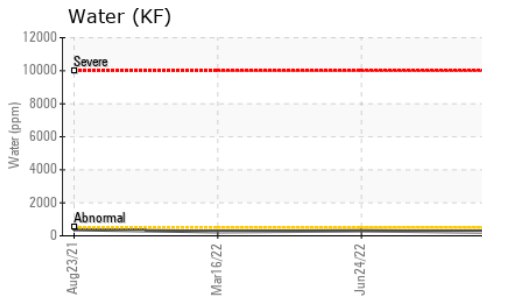
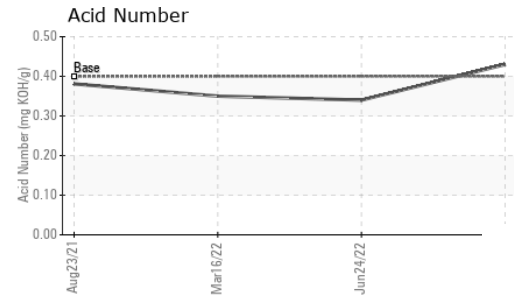
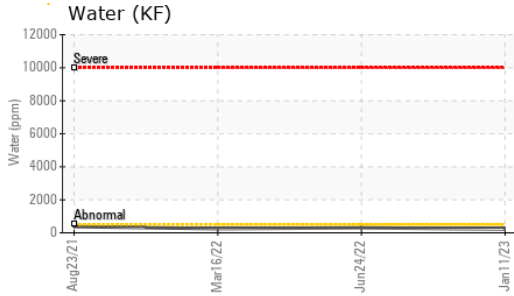
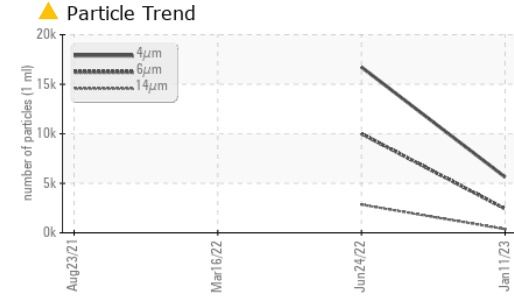
**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>5626</b>	16730	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 2422</b>	▲ 10007	---
Particles >14µm	ASTM D7647 >80	<b>▲ 374</b>	▲ 2845	---
Particles >21µm	ASTM D7647 >20	<b>▲ 106</b>	▲ 1221	---
Particles >38µm	ASTM D7647 >4	<b>▲ 11</b>	▲ 99	---
Particles >71µm	ASTM D7647 >3	<b>1</b>	2	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 20/18/16</b>	▲ 21/21/19	---

**FLUID DEGRADATION**

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.43</b>	0.34	0.35

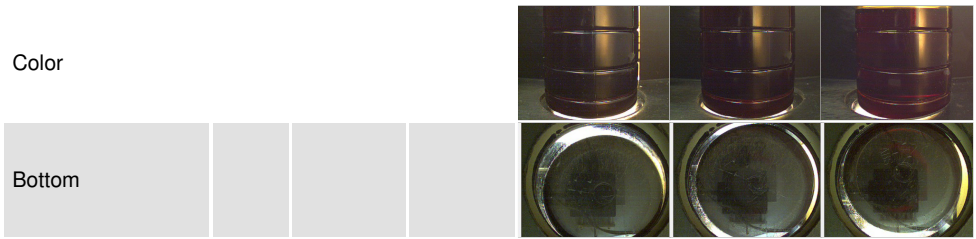
# OIL ANALYSIS REPORT



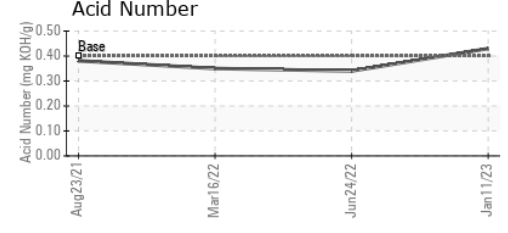
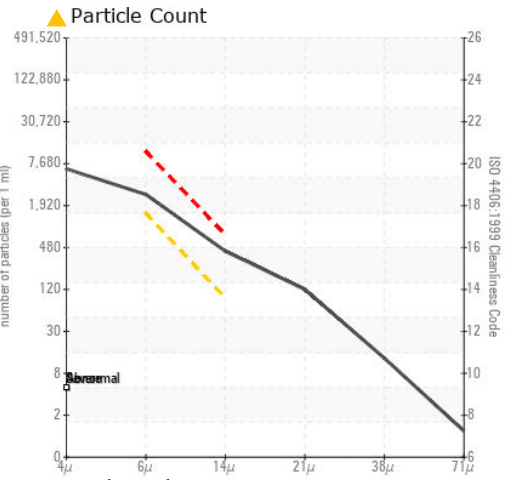
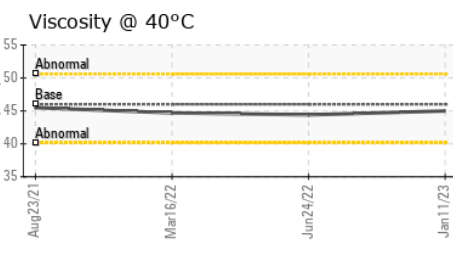
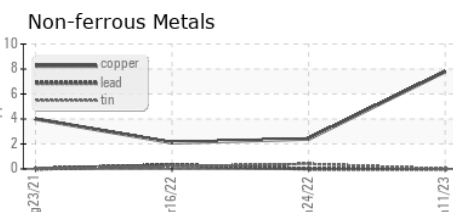
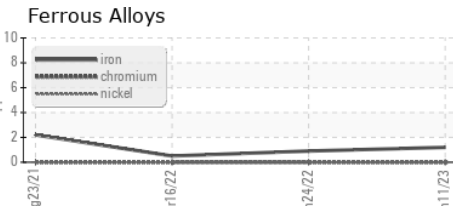
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	VLITE	LIGHT	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	VLITE	LIGHT	NONE
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	45.0	44.4	44.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP47995D **Received** : 17 Jan 2023  
**Lab Number** : 05741465 **Diagnosed** : 18 Jan 2023  
**Unique Number** : 10296064 **Diagnostician** : Don Baldrige  
**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  
 T:  
 F:

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)