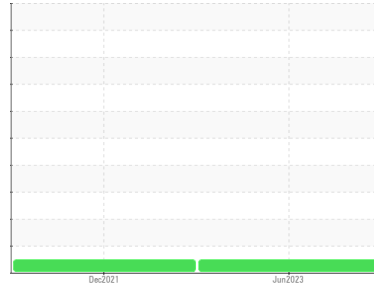




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**KAESER 7310825**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCPA004516</b>	KCP43608	---
Sample Date	Client Info		<b>23 Jun 2023</b>	13 Dec 2021	---
Machine Age	hrs	Client Info	<b>445</b>	262	---
Oil Age	hrs	Client Info	<b>0</b>	262	---
Oil Changed	Client Info		<b>N/A</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	2	---
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>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	2	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >50	<b>1</b>	2	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Antimony	ppm	ASTM D5185m	<b>---</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 0	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m 90	<b>1</b>	5	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 100	<b>77</b>	70	---
Calcium	ppm	ASTM D5185m 0	<b>2</b>	1	---
Phosphorus	ppm	ASTM D5185m 0	<b>2</b>	7	---
Zinc	ppm	ASTM D5185m 0	<b>0</b>	2	---
Sulfur	ppm	ASTM D5185m 23500	<b>23672</b>	17342	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>13</b>	7	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	---
Water	%	ASTM D6304 >0.05	<b>0.019</b>	0.016	---
ppm Water	ppm	ASTM D6304 >500	<b>196.1</b>	167.1	---

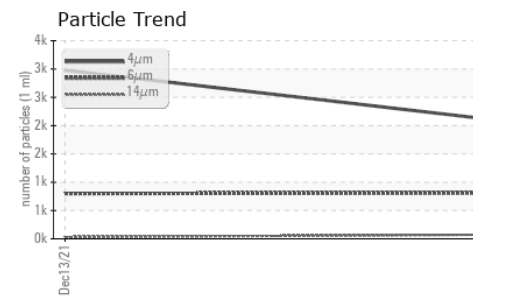
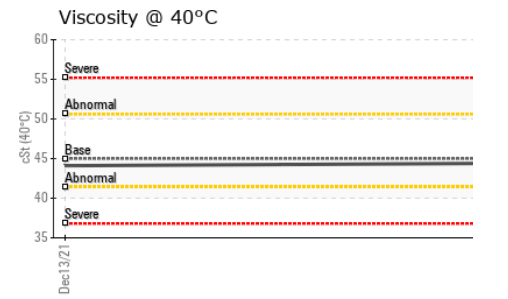
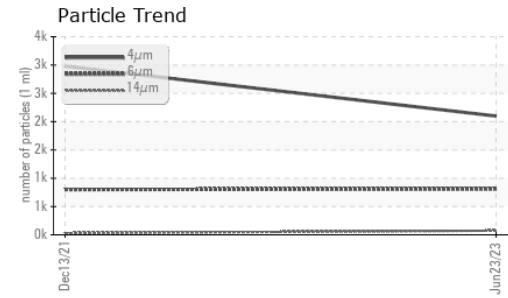
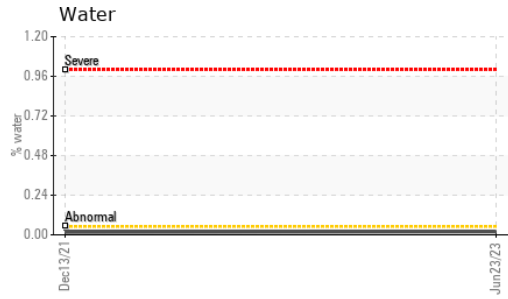
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>2098</b>	2979	---
Particles >6µm	ASTM D7647 >1300		<b>812</b>	799	---
Particles >14µm	ASTM D7647 >80		<b>73</b>	30	---
Particles >21µm	ASTM D7647 >20		<b>20</b>	4	---
Particles >38µm	ASTM D7647 >4		<b>1</b>	0	---
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>18/17/13</b>	17/12	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.38</b>	0.149	---

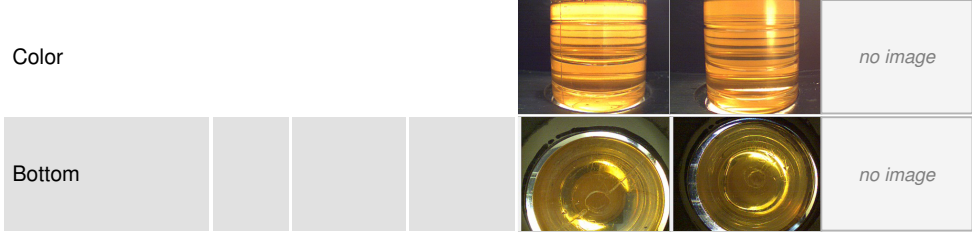
# OIL ANALYSIS REPORT



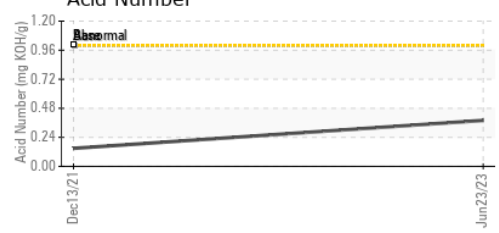
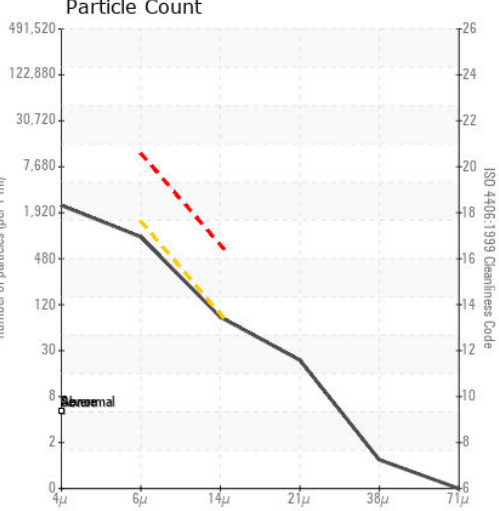
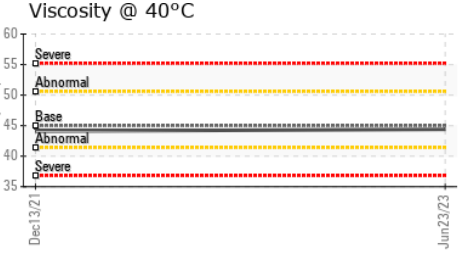
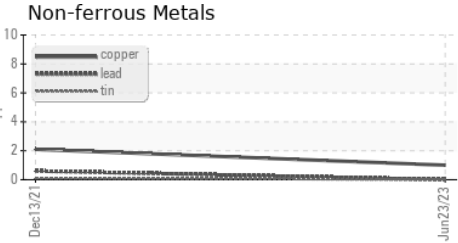
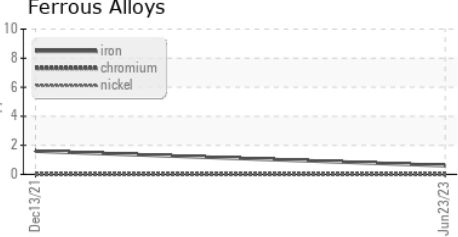
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	44.1	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004516 **Received** : 20 Jul 2023  
**Lab Number** : 05903802 **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565158 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SANDER HAWKINS**  
 17511 WHITES STORE RD  
 BOYDS, MD  
 US 20841  
 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)