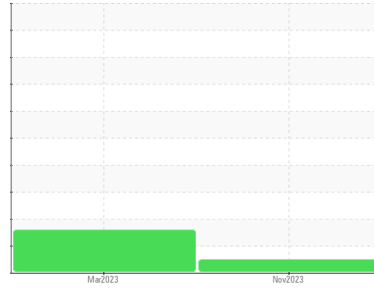




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER 8011825**

Component  
**Compressor**

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

### DIAGNOSIS

#### Recommendation

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 on this sample.

#### Wear

All component wear rates are normal.

#### Contamination

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>KCPA007273</b>	KCP53146	---
Sample Date	Client Info			<b>09 Nov 2023</b>	01 Mar 2023	---
Machine Age	hrs	Client Info		<b>8926</b>	6236	---
Oil Age	hrs	Client Info		<b>0</b>	5000	---
Oil Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	---
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>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>9</b>	6	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

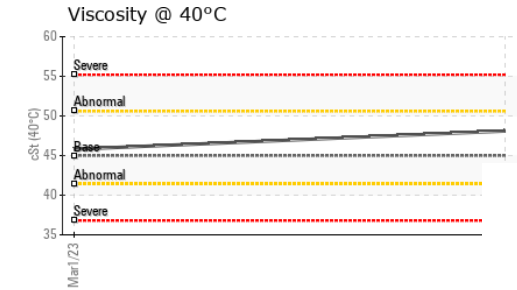
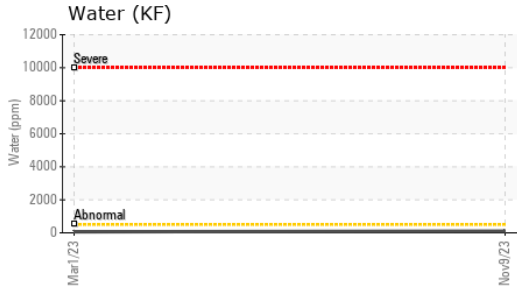
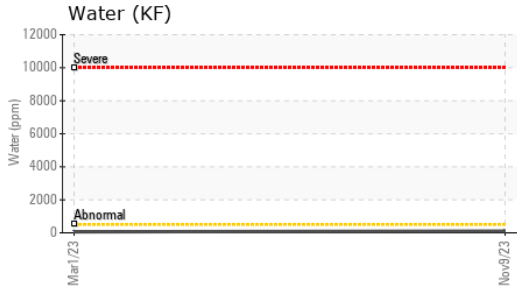
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>0</b>	0	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	0	---
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m	23500	<b>15696</b>	15989	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	1	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water	%	ASTM D6304	>0.05	<b>0.010</b>	0.006	---
ppm Water	ppm	ASTM D6304	>500	<b>102</b>	61.3	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	12664	---
Particles >6µm		ASTM D7647	>1300	---	▲ 5830	---
Particles >14µm		ASTM D7647	>80	---	▲ 441	---
Particles >21µm		ASTM D7647	>20	---	▲ 112	---
Particles >38µm		ASTM D7647	>4	---	6	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 21/20/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.39</b>	0.41	---

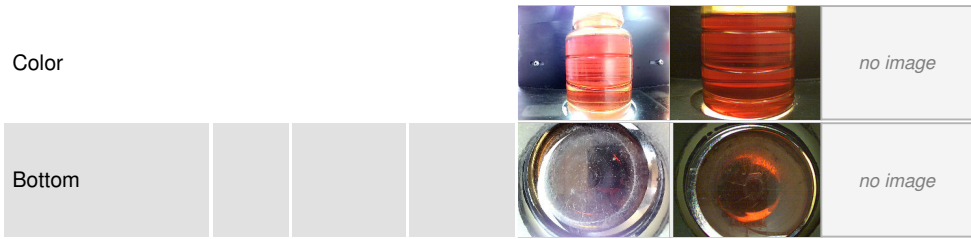
# OIL ANALYSIS REPORT



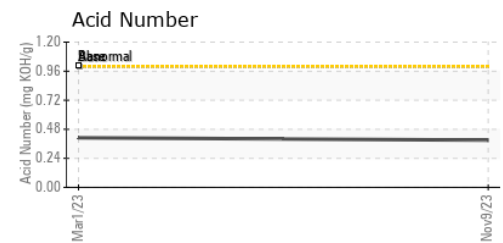
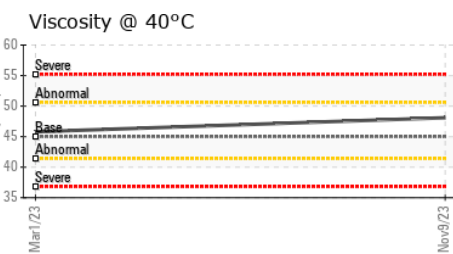
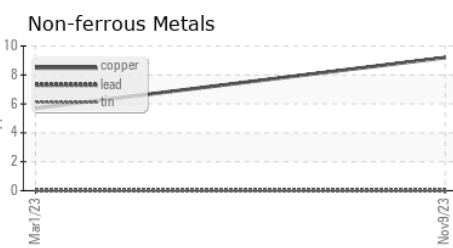
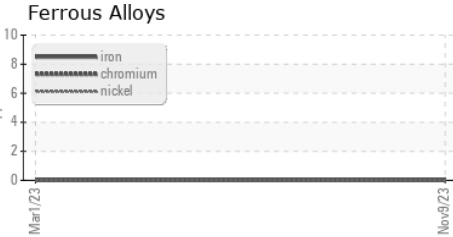
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>HEAVY</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	---
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	45	<b>48.1</b>	45.8	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA007273 **Received** : 24 Nov 2023  
**Lab Number** : 06017356 **Diagnosed** : 29 Nov 2023  
**Unique Number** : 10756500 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ARMSTRONG TECH**  
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 SUNNYVALE, CA  
 US 94089  
 Contact: A. ARMSTRONG  
 aarmstrong@armstrong.tech.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)