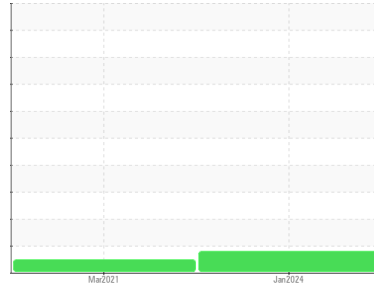




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**KAESER AS 20T 5022876 (S/N 1009)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-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 silt (particulates < 14 microns in size) 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>KCPA008844</b>	KCP37219	---
Sample Date	Client Info		<b>22 Jan 2024</b>	29 Mar 2021	---
Machine Age	hrs	Client Info	<b>49732</b>	42441	---
Oil Age	hrs	Client Info	<b>0</b>	6666	---
Oil Changed	Client Info		<b>N/A</b>	Changed	---
Sample Status			<b>ATTENTION</b>	NORMAL	---

## 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>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>2</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>6</b>	8	---
Tin	ppm	ASTM D5185m >10	<b>1</b>	<1	---
Antimony	ppm	ASTM D5185m	<b>---</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>	9	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m	<b>2</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>30</b>	6	---
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>4</b>	1	---
Zinc	ppm	ASTM D5185m 0	<b>37</b>	53	---
Sulfur	ppm	ASTM D5185m 23500	<b>19226</b>	14063	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	---
Sodium	ppm	ASTM D5185m	<b>14</b>	5	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	0	---
Water	%	ASTM D6304 >0.05	<b>0.013</b>	0.007	---
ppm Water	ppm	ASTM D6304 >500	<b>132</b>	79.8	---

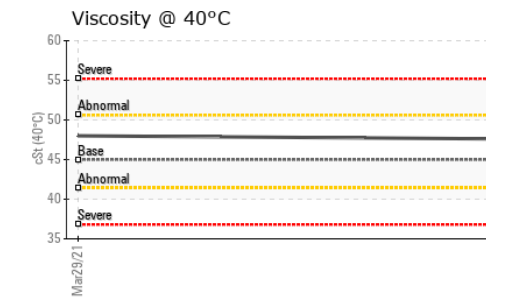
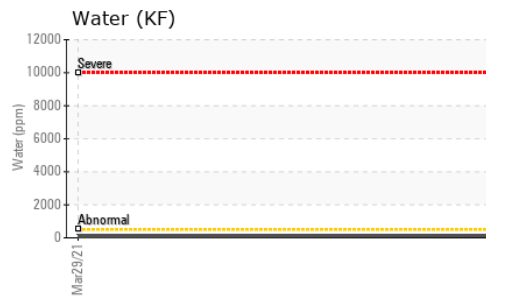
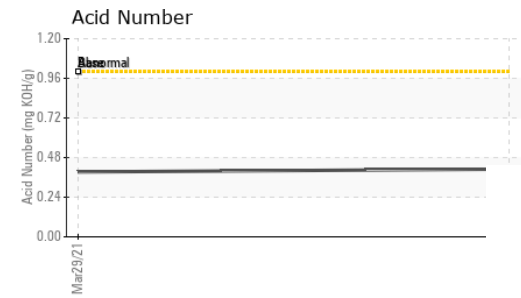
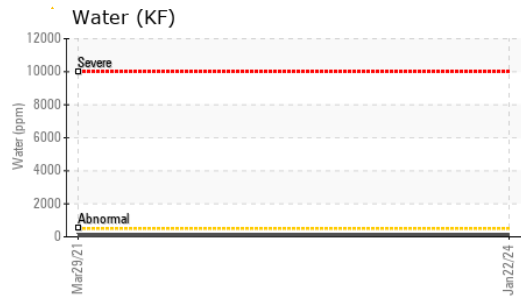
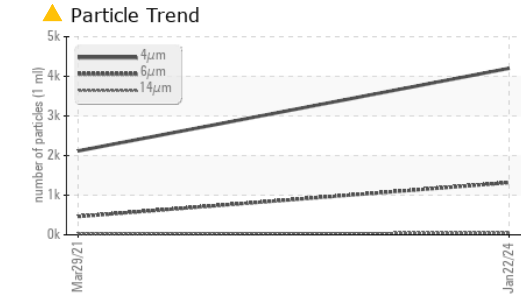
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4202</b>	2117	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 1318</b>	462	---
Particles >14µm	ASTM D7647	>80	<b>50</b>	28	---
Particles >21µm	ASTM D7647	>20	<b>12</b>	7	---
Particles >38µm	ASTM D7647	>4	<b>1</b>	1	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 19/18/13</b>	16/12	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.41</b>	0.393	---

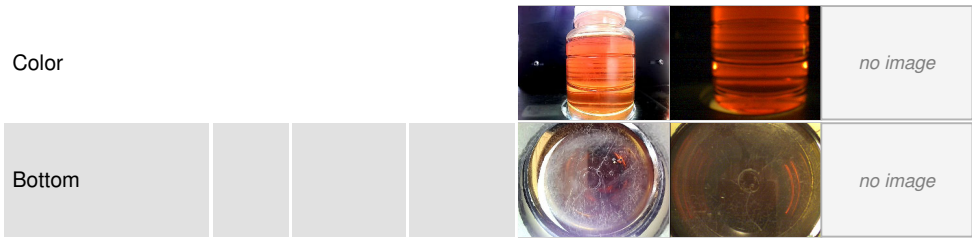
# OIL ANALYSIS REPORT



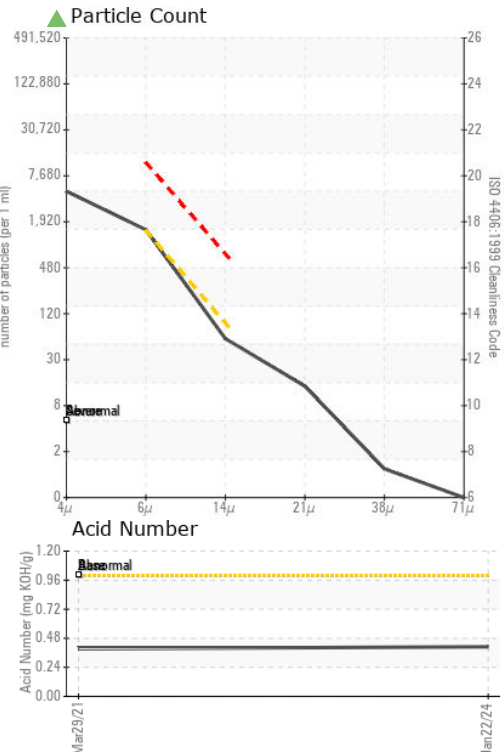
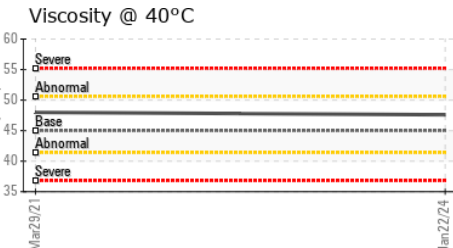
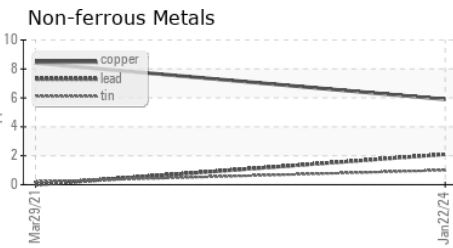
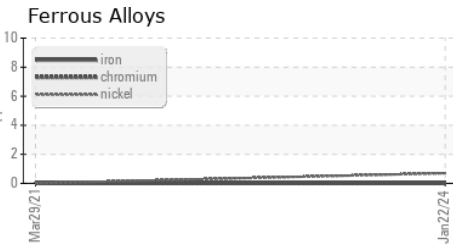
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	47.6	48.0	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA008844 **Received** : 01 Feb 2024  
**Lab Number** : 06077726 **Diagnosed** : 04 Feb 2024  
**Unique Number** : 10859817 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CARMAX**  
 3611 FOUNTAINHEAD DR  
 SAN ANTONIO, TX  
 US 78229  
 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)