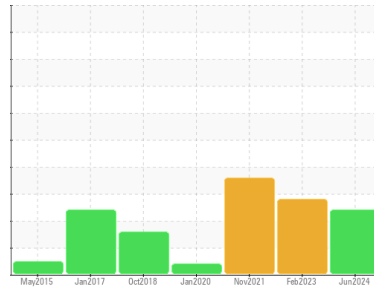




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER AC SFC 11 4781956 (S/N 1007)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## 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. Moderate concentration of visible dirt/debris 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>KCPA016811</b>	KCP54214	KCP39540
Sample Date	Client Info	<b>04 Jun 2024</b>	27 Feb 2023	12 Nov 2021
Machine Age	hrs	<b>35324</b>	29874	25080
Oil Age	hrs	<b>5450</b>	4737	4169
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	<b>2</b>	<1	<1
Chromium	ppm ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >3	<b>0</b>	<1	2
Titanium	ppm ASTM D5185m >3	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >10	<b>0</b>	<1	<1
Lead	ppm ASTM D5185m >10	<b>0</b>	0	1
Copper	ppm ASTM D5185m >50	<b>32</b>	23	39
Tin	ppm ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm ASTM D5185m	<b>---</b>	---	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</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>	0	0
Barium	ppm ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>0</b>	<1	1
Magnesium	ppm ASTM D5185m 90	<b>0</b>	5	<1
Calcium	ppm ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm ASTM D5185m	<b>&lt;1</b>	2	6
Zinc	ppm ASTM D5185m	<b>12</b>	23	0
Sulfur	ppm ASTM D5185m	<b>17101</b>	16366	13486

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>&lt;1</b>	<1	0
Sodium	ppm ASTM D5185m	<b>2</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>0</b>	0	0
Water	% ASTM D6304 >0.05	<b>0.015</b>	▲ 0.716	▲ 0.179
ppm Water	ppm ASTM D6304 >500	<b>158</b>	▲ 7160	▲ 1790

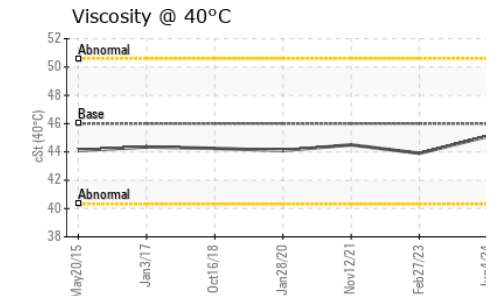
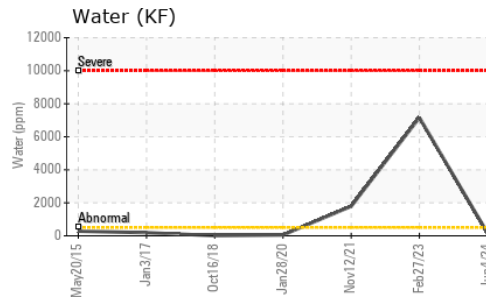
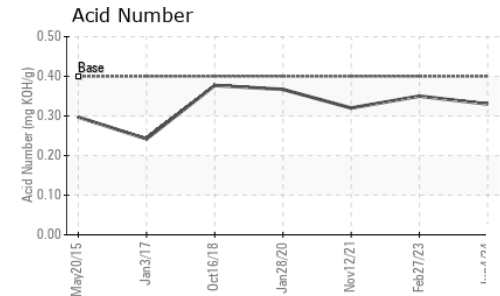
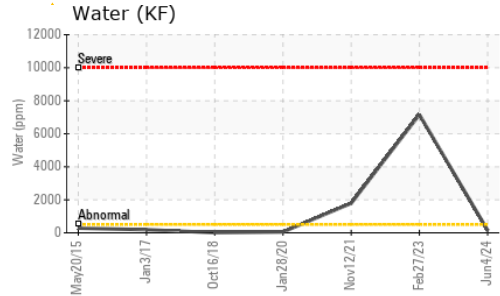
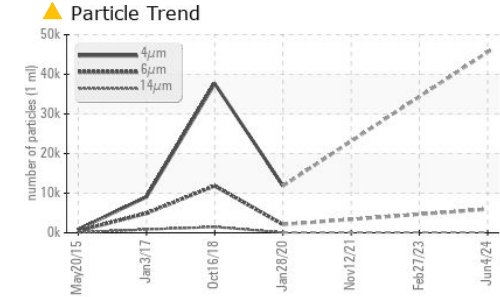
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>45600</b>	---	---
Particles >6µm	ASTM D7647 >1300	▲ <b>5972</b>	---	---
Particles >14µm	ASTM D7647 >80	▲ <b>131</b>	---	---
Particles >21µm	ASTM D7647 >20	▲ <b>51</b>	---	---
Particles >38µm	ASTM D7647 >4	▲ <b>5</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >17/13	▲ <b>20/14</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.4	<b>0.33</b>	0.35	0.320

# OIL ANALYSIS REPORT



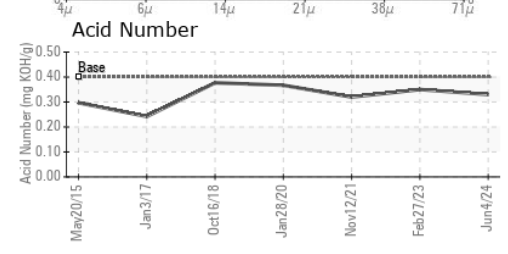
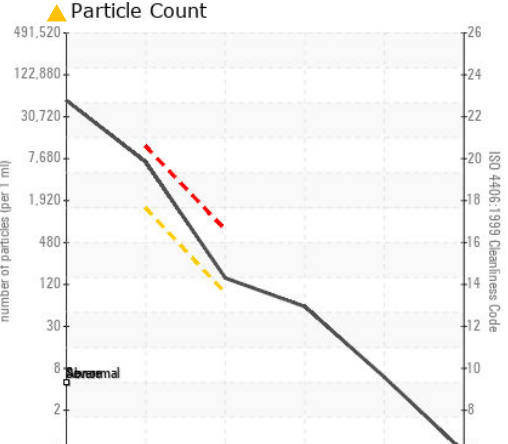
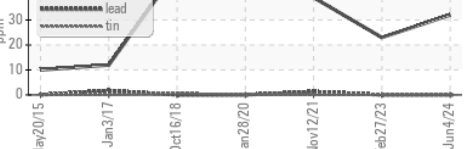
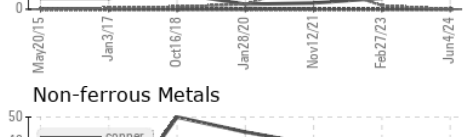
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.1	43.9

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color				
Bottom				

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016811 **Received** : 10 Jun 2024  
**Lab Number** : 06205425 **Tested** : 12 Jun 2024  
**Unique Number** : 11072886 **Diagnosed** : 13 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**TOP FLIGHT MACHINE**  
 95 ROBERT JACKSON WAY  
 PLAINVILLE, CT  
 US 06062  
 Contact: STAN  
 stan@topflightmachine.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)