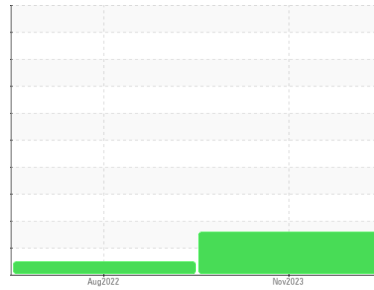




# PROBLEM SUMMARY

Sample Rating Trend



ISO

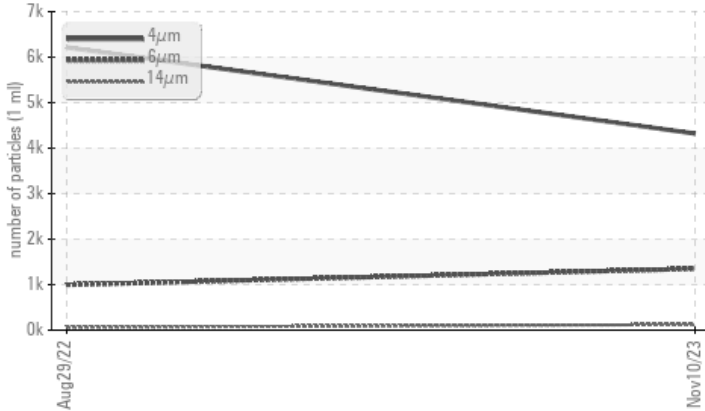


Area  
**[73387590]**  
 Machine Id  
**2539811 (S/N 1186)**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ <b>1349</b>	995	---
Particles >14µm	ASTM D7647	>80	▲ <b>123</b>	61	---
Particles >21µm	ASTM D7647	>20	▲ <b>31</b>	15	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/18/14</b>	20/17/13	---

Customer Id: ICHFRE  
 Sample No.: KCPA007310  
 Lab Number: 06017337  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**29 Aug 2022 Diag: Jonathan Hester**

NORMAL



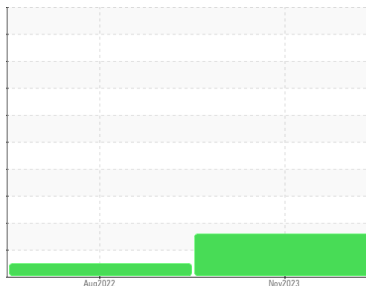
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

[73387590]

Machine Id

2539811 (S/N 1186)

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.

**Wear**

All component wear rates are normal.

**Contamination**

There is a moderate 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>KCPA007310</b>	KCP33293	---
Sample Date	Client Info	<b>10 Nov 2023</b>	29 Aug 2022	---
Machine Age	hrs	<b>21171</b>	19914	---
Oil Age	hrs	<b>0</b>	3000	---
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>	3	---
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>	<1	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >50	<b>4</b>	2	---
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>26</b>	<1	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m 100	<b>67</b>	73	---
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	2	---
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	1	---
Zinc	ppm	ASTM D5185m 0	<b>7</b>	8	---
Sulfur	ppm	ASTM D5185m 23500	<b>19495</b>	18719	---

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>23</b>	25	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	1	---
Water	%	ASTM D6304 >0.05	<b>0.027</b>	0.024	---
ppm Water	ppm	ASTM D6304 >500	<b>275</b>	249.0	---

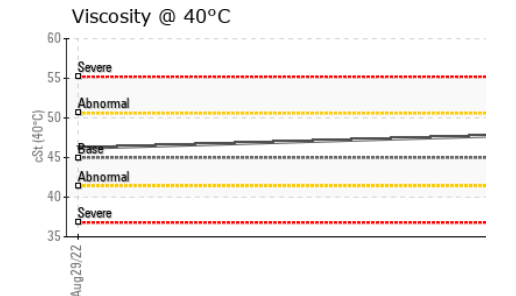
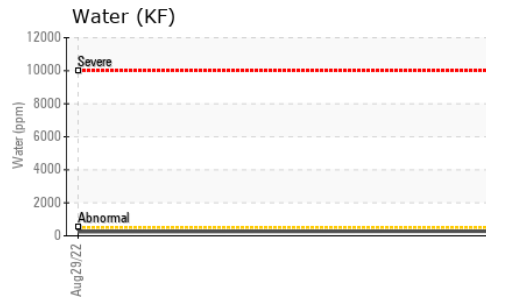
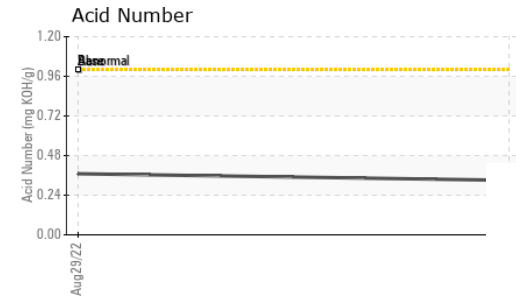
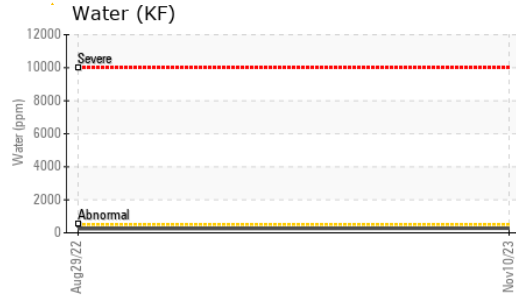
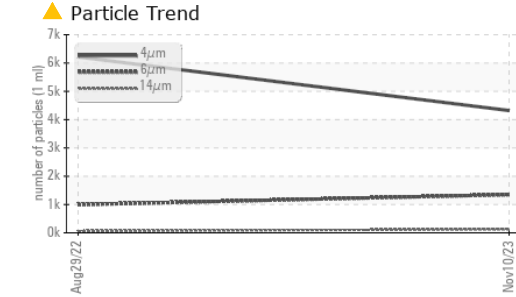
**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>4321</b>	6214	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 1349</b>	995	---
Particles >14µm	ASTM D7647 >80	<b>▲ 123</b>	61	---
Particles >21µm	ASTM D7647 >20	<b>▲ 31</b>	15	---
Particles >38µm	ASTM D7647 >4	<b>2</b>	0	---
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 19/18/14</b>	20/17/13	---

**FLUID DEGRADATION**

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.33</b>	0.37	---

# OIL ANALYSIS REPORT



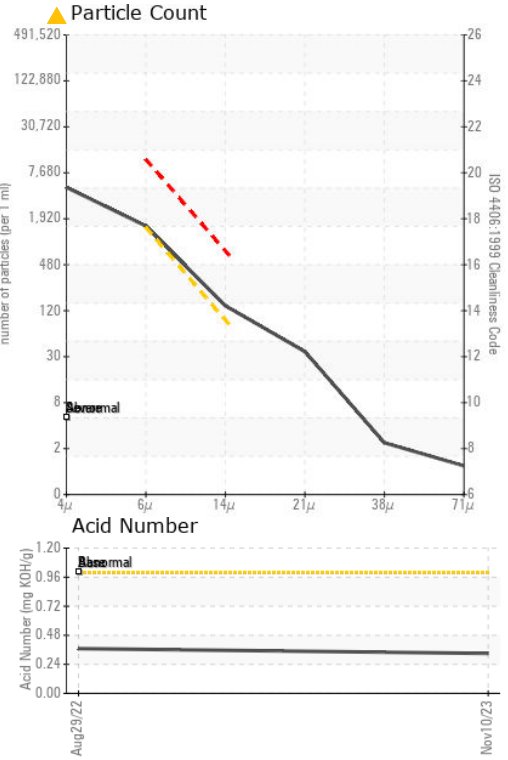
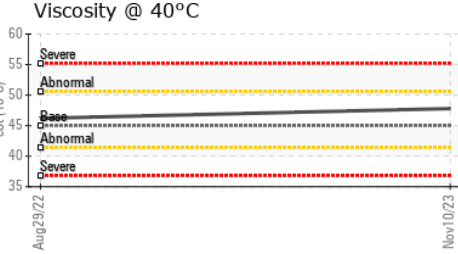
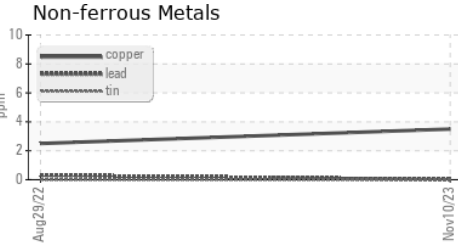
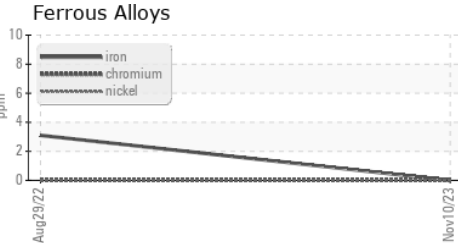
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	47.8	46.2

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color				
Bottom				

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA007310 **Received** : 24 Nov 2023  
**Lab Number** : 06017337 **Diagnosed** : 29 Nov 2023  
**Unique Number** : 10756481 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ICHOR SYSTEMS - CAL-WELD**  
 4308 SOLAR WAY  
 FREMONT, CA  
 US 94538  
 Contact: J. STRAUBE  
 jstraube@ichorsystems.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)