

# PROBLEM SUMMARY

## Sample Rating Trend



ISO

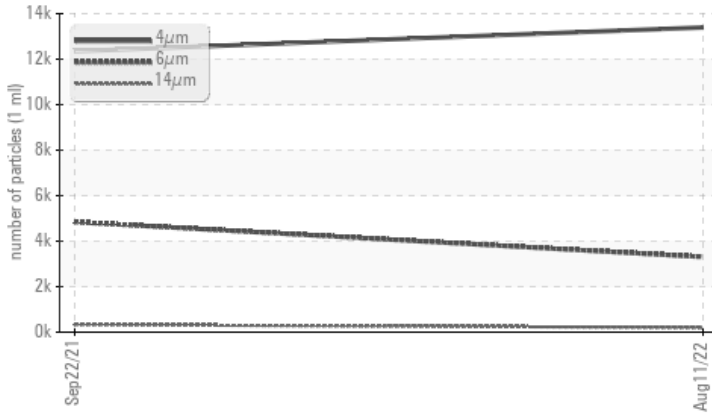


Machine Id  
**7721831 (S/N 1624)**

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

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ 3306	▲ 4840	---
Particles >14µm	ASTM D7647	>80	▲ 196	▲ 331	---
Particles >21µm	ASTM D7647	>20	▲ 43	▲ 144	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	▲ 19/16	---

Customer Id: SPISTO  
Sample No.: KC104960  
Lab Number: 05618957  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

22 Sep 2021 Diag: Jonathan Hester

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. 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



Machine Id  
**7721831 (S/N 1624)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### DIAGNOSIS

#### ▲ Recommendation

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.

#### 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	history 1	history 2
Sample Number			<b>KC104960</b>	KC88916	---
Sample Date			<b>11 Aug 2022</b>	22 Sep 2021	---
Machine Age	hrs		<b>15368</b>	2312	---
Oil Age	hrs		<b>3000</b>	2312	---
Oil Changed			<b>Changed</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

### WEAR METALS

	method	limit/base	current	history 1	history 2
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>	<1	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>3</b>	5	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
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	history 1	history 2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	24	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	2	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>7</b>	9	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	6	---
Phosphorus	ppm	ASTM D5185m 0	<b>3</b>	2	---
Zinc	ppm	ASTM D5185m 0	<b>&lt;1</b>	5	---

### CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>2</b>	1	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	14	---
Water	%	ASTM D6304 >0.05	<b>0.010</b>	0.004	---
ppm Water	ppm	ASTM D6304 >500	<b>107.7</b>	43.3	---

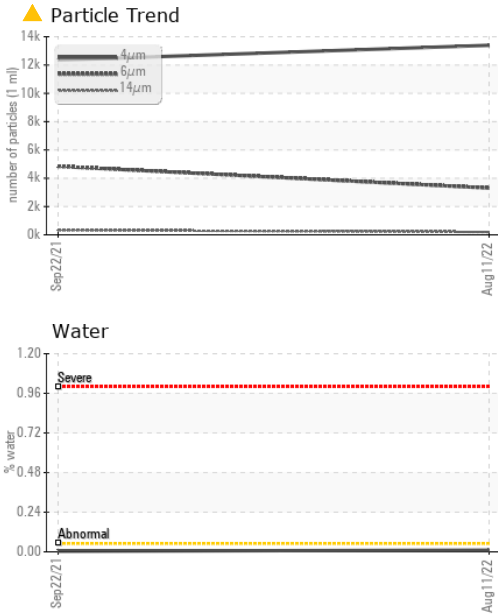
### FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>13393</b>	12347	---
Particles >6µm	ASTM D7647	>1300	▲ <b>3306</b>	▲ 4840	---
Particles >14µm	ASTM D7647	>80	▲ <b>196</b>	▲ 331	---
Particles >21µm	ASTM D7647	>20	▲ <b>43</b>	▲ 144	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	▲ 12	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/15</b>	▲ 19/16	---

### FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.38</b>	0.399	---

# OIL ANALYSIS REPORT

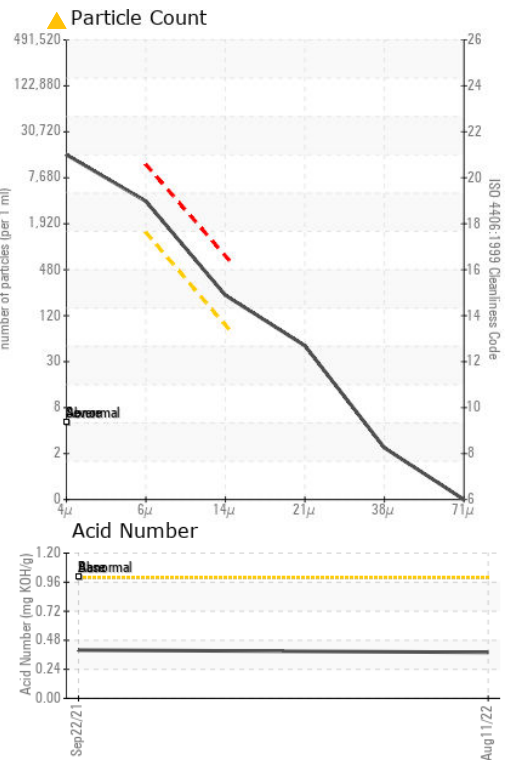
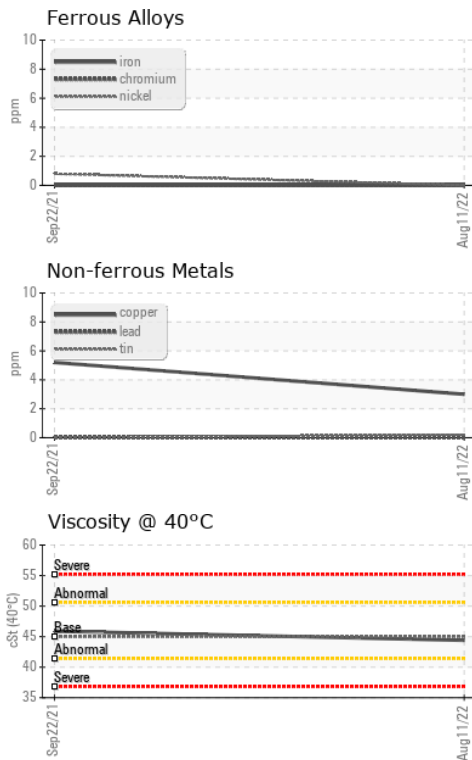


PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

PARAMETER	method	limit/base	current	history 1	history 2
FLUID PROPERTIES					
Visc @ 40°C	cSt	ASTM D445	45	44.4	45.9

PARAMETER	method	limit/base	current	history 1	history 2
SAMPLE IMAGES					
Color					no image
Bottom					no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC104960 **Received** : 16 Aug 2022  
**Lab Number** : 05618957 **Diagnosed** : 18 Aug 2022  
**Unique Number** : 10098464 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**SPIROL**  
 321 REMINGTON RD  
 STOW, OH  
 USA 44224  
 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)