



# PROBLEM SUMMARY

## Sample Rating Trend



ISO



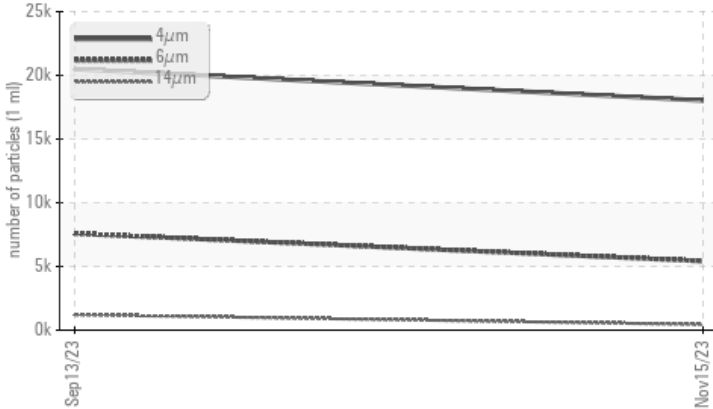
Machine Id  
**8670737 (S/N 1364)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ASTM D7647	ABNORMAL	ABNORMAL	---
Particles >6µm	>1300	▲ <b>5418</b>	▲ 7578	---	
Particles >14µm	>80	▲ <b>442</b>	▲ 1209	---	
Particles >21µm	>20	▲ <b>127</b>	▲ 379	---	
Particles >38µm	>4	▲ <b>5</b>	▲ 7	---	
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/20/16</b>	▲ 22/20/17	---

Customer Id: CHECOLCA  
Sample No.: KCPA003242  
Lab Number: 06016431  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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

### 13 Sep 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component. 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  
**8670737 (S/N 1364)**

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 high amount of particulates present in the oil.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

**SAMPLE INFORMATION**    method    limit/base    current    history1    history2

Sample Number	Client Info		<b>KCPA003242</b>	KCPA005714	---
Sample Date	Client Info		<b>15 Nov 2023</b>	13 Sep 2023	---
Machine Age	hrs	Client Info	<b>2301</b>	1769	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

**WEAR METALS**    method    limit/base    current    history1    history2

Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>2</b>	4	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---

**ADDITIVES**    method    limit/base    current    history1    history2

Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>34</b>	1	---
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	100	<b>51</b>	46	---
Calcium	ppm	ASTM D5185m	0	<b>2</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>10</b>	4	---
Zinc	ppm	ASTM D5185m	0	<b>5</b>	10	---
Sulfur	ppm	ASTM D5185m	23500	<b>14442</b>	20861	---

**CONTAMINANTS**    method    limit/base    current    history1    history2

Silicon	ppm	ASTM D5185m	>25	<b>2</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>5</b>	9	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	6	---
Water	%	ASTM D6304	>0.05	<b>0.022</b>	0.014	---
ppm Water	ppm	ASTM D6304	>500	<b>229</b>	149.0	---

**FLUID CLEANLINESS**    method    limit/base    current    history1    history2

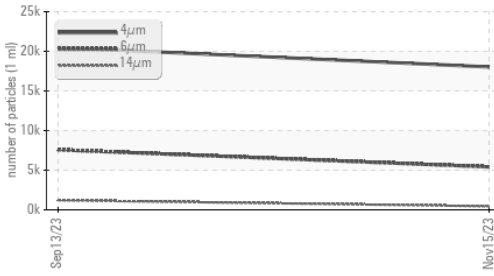
Particles >4µm	ASTM D7647			<b>18026</b>	20491	---
Particles >6µm	ASTM D7647	>1300		<b>▲ 5418</b>	▲ 7578	---
Particles >14µm	ASTM D7647	>80		<b>▲ 442</b>	▲ 1209	---
Particles >21µm	ASTM D7647	>20		<b>▲ 127</b>	▲ 379	---
Particles >38µm	ASTM D7647	>4		<b>▲ 5</b>	▲ 7	---
Particles >71µm	ASTM D7647	>3		<b>0</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13		<b>▲ 21/20/16</b>	▲ 22/20/17	---

**FLUID DEGRADATION**    method    limit/base    current    history1    history2

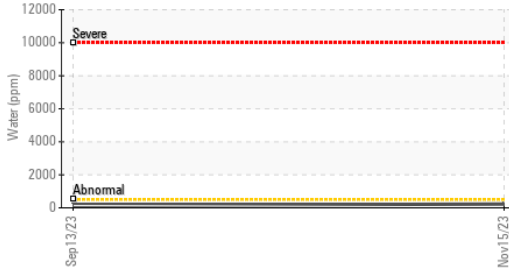
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.35</b>	0.40	---
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# OIL ANALYSIS REPORT

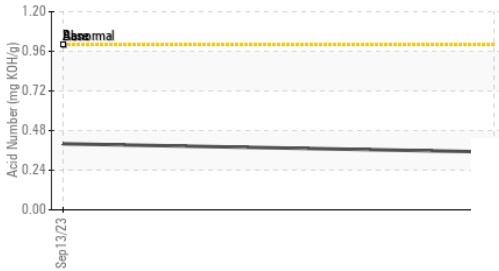
## Particle Trend



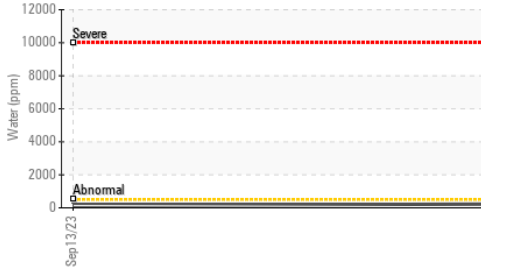
## Water (KF)



## Acid Number



## Water (KF)



## Viscosity @ 40°C



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	---

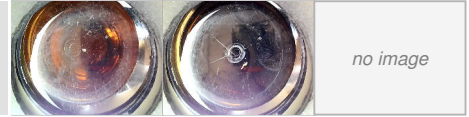
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	47.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

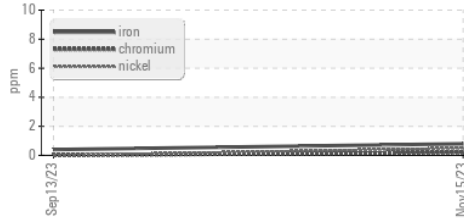


Bottom

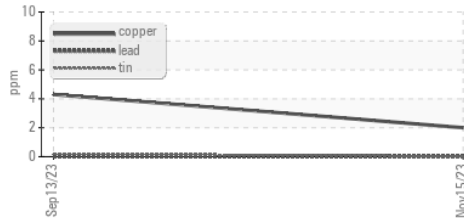


## GRAPHS

### Ferrous Alloys



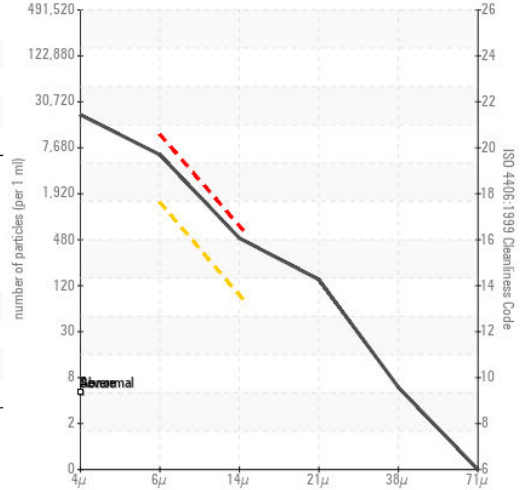
### Non-ferrous Metals



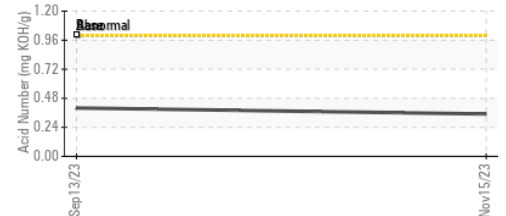
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA003242 **Received** : 24 Nov 2023  
**Lab Number** : 06016431 **Diagnosed** : 27 Nov 2023  
**Unique Number** : 10755575 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

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)

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