



# PROBLEM SUMMARY

Sample Rating Trend



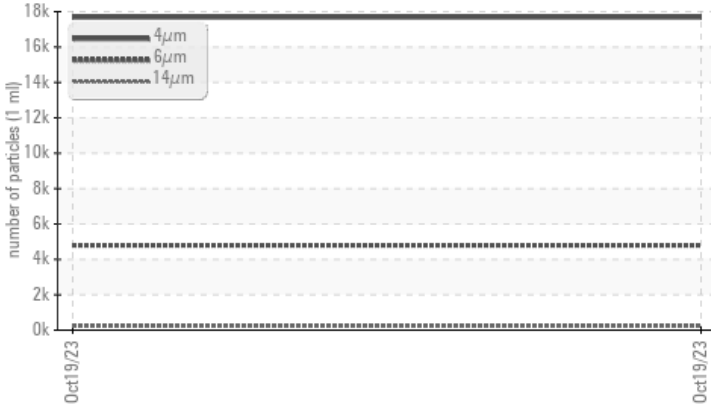
ISO



Machine Id  
**KAESER SM 10 8024006 (S/N 1759)**  
 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				<b>ABNORMAL</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>4791</b>	---	---	---
Particles >14µm	ASTM D7647	>80	▲ <b>221</b>	---	---	---
Particles >21µm	ASTM D7647	>20	▲ <b>49</b>	---	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/15</b>	---	---	---

Customer Id: NAVWAS  
 Sample No.: KCPA000523  
 Lab Number: 06007723  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM 10 8024006 (S/N 1759)**

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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA000523</b>	---	---
Sample Date	Client Info	<b>19 Oct 2023</b>	---	---
Machine Age	hrs Client Info	<b>106</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>50	<b>2</b>	---	---
Chromium ppm ASTM D5185m	>10	<b>0</b>	---	---
Nickel ppm ASTM D5185m	>3	<b>0</b>	---	---
Titanium ppm ASTM D5185m	>3	<b>&lt;1</b>	---	---
Silver ppm ASTM D5185m	>2	<b>0</b>	---	---
Aluminum ppm ASTM D5185m	>10	<b>0</b>	---	---
Lead ppm ASTM D5185m	>10	<b>0</b>	---	---
Copper ppm ASTM D5185m	>50	<b>&lt;1</b>	---	---
Tin ppm ASTM D5185m	>10	<b>0</b>	---	---
Vanadium ppm ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	0	<b>0</b>	---	---
Barium ppm ASTM D5185m	90	<b>20</b>	---	---
Molybdenum ppm ASTM D5185m	0	<b>0</b>	---	---
Manganese ppm ASTM D5185m		<b>0</b>	---	---
Magnesium ppm ASTM D5185m	100	<b>2</b>	---	---
Calcium ppm ASTM D5185m	0	<b>0</b>	---	---
Phosphorus ppm ASTM D5185m	0	<b>0</b>	---	---
Zinc ppm ASTM D5185m	0	<b>0</b>	---	---
Sulfur ppm ASTM D5185m	23500	<b>17828</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>25	<b>0</b>	---	---
Sodium ppm ASTM D5185m		<b>6</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>0</b>	---	---
Water % ASTM D6304	>0.05	<b>0.022</b>	---	---
ppm Water ppm ASTM D6304	>500	<b>229.1</b>	---	---

## FLUID CLEANLINESS

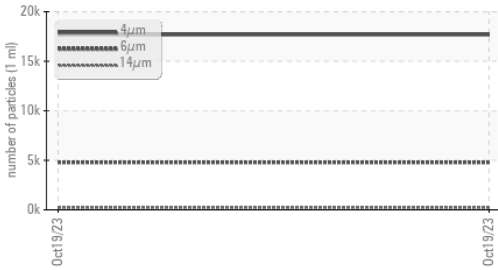
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		<b>17680</b>	---	---
Particles >6µm ASTM D7647	>1300	<b>▲ 4791</b>	---	---
Particles >14µm ASTM D7647	>80	<b>▲ 221</b>	---	---
Particles >21µm ASTM D7647	>20	<b>▲ 49</b>	---	---
Particles >38µm ASTM D7647	>4	<b>1</b>	---	---
Particles >71µm ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness ISO 4406 (c)	>--/17/13	<b>▲ 21/19/15</b>	---	---

## FLUID DEGRADATION

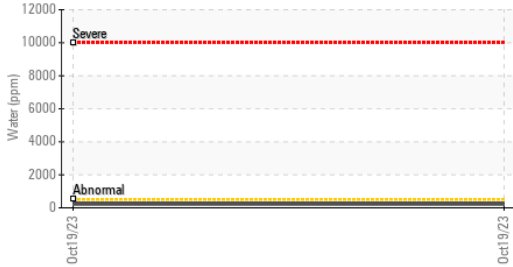
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	1.0	<b>0.36</b>	---	---

# OIL ANALYSIS REPORT

## ▲ Particle Trend



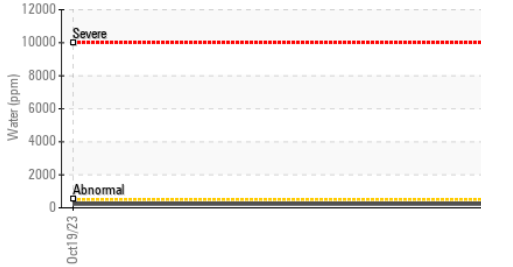
## Water (KF)



## Acid Number



## Water (KF)



## Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual >0.05	<b>NEG</b>	---	---
Free Water	scalar	*Visual	<b>NEG</b>	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	<b>44.1</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS

### Ferrous Alloys



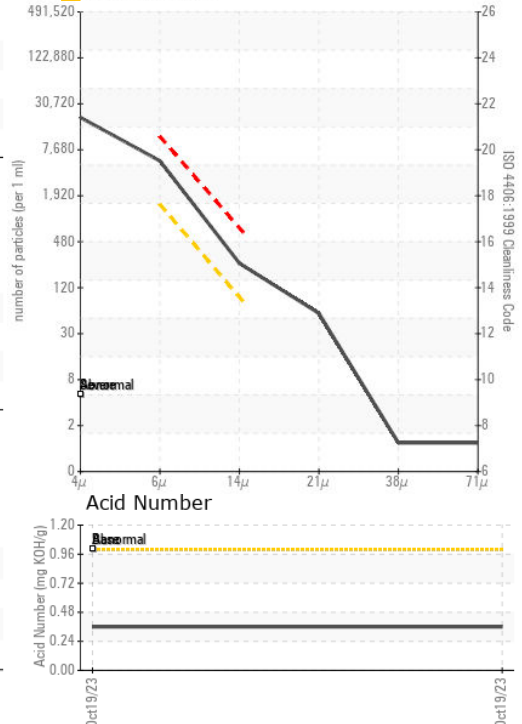
### Non-ferrous Metals



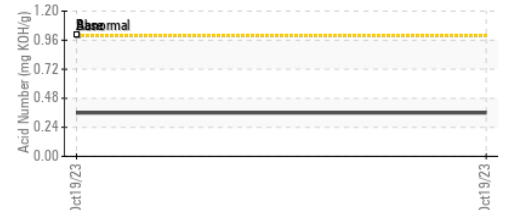
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA000523 **Received** : 14 Nov 2023  
**Lab Number** : 06007723 **Diagnosed** : 16 Nov 2023  
**Unique Number** : 10741485 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NAVAL RESEARCH LABORATORY**  
 4555 OVERLOOK AVE, BLDG 49  
 WASHINGTON, DC  
 US 20375  
 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)

T:  
F: