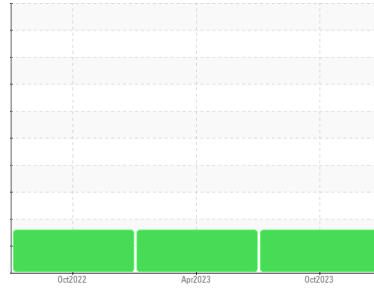




# PROBLEM SUMMARY

## Sample Rating Trend



ISO



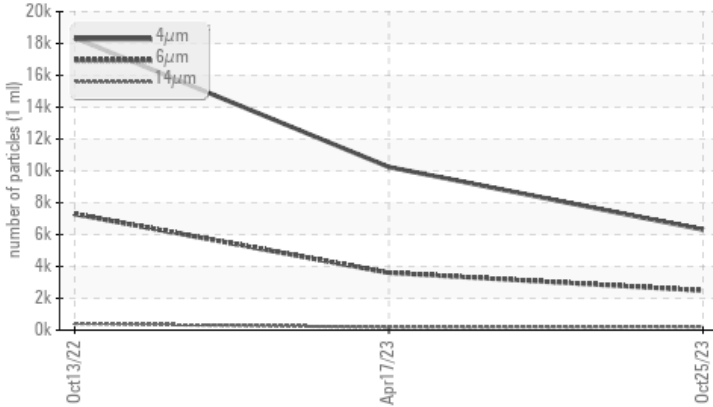
Machine Id  
**KAESER SM 10 8120684 (S/N 1801)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-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	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>2488</b>	▲ 3600	▲ 7296
Particles >14µm	ASTM D7647	>80	▲ <b>207</b>	▲ 180	▲ 407
Particles >21µm	ASTM D7647	>20	▲ <b>43</b>	▲ 43	▲ 55
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/18/15</b>	▲ 21/19/15	▲ 21/20/16

Customer Id: WASWASPA

Sample No.: KC124372

Lab Number: 06000507

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

**17 Apr 2023 Diag: Jonathan Hester**

ISO



The 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



**13 Oct 2022 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.

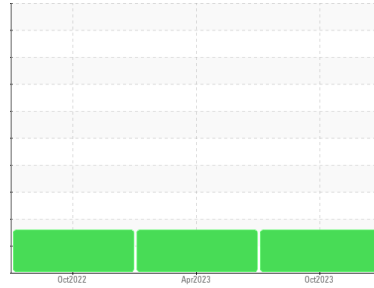
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM 10 8120684 (S/N 1801)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-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	history1	history2
Sample Number	Client Info			<b>KC124372</b>	KC101521	KC85922
Sample Date	Client Info			<b>25 Oct 2023</b>	17 Apr 2023	13 Oct 2022
Machine Age	hrs	Client Info		<b>18066</b>	13592	9136
Oil Age	hrs	Client Info		<b>0</b>	4400	6000
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>21</b>	11	35
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</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	0
Magnesium	ppm	ASTM D5185m	90	<b>0</b>	16	2
Calcium	ppm	ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>2</b>	3	1
Zinc	ppm	ASTM D5185m		<b>0</b>	7	10

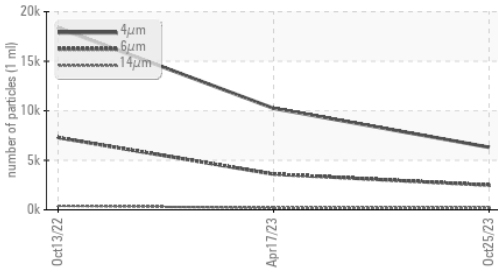
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m		<b>2</b>	4	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Water	%	ASTM D6304	>0.05	<b>0.004</b>	0.007	0.003
ppm Water	ppm	ASTM D6304	>500	<b>47.2</b>	71.7	35.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>6312</b>	10242	18367
Particles >6µm		ASTM D7647	>1300	▲ <b>2488</b>	▲ 3600	▲ 7296
Particles >14µm		ASTM D7647	>80	▲ <b>207</b>	▲ 180	▲ 407
Particles >21µm		ASTM D7647	>20	▲ <b>43</b>	▲ 43	▲ 55
Particles >38µm		ASTM D7647	>4	<b>2</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>20/18/15</b>	▲ 21/19/15	▲ 21/20/16

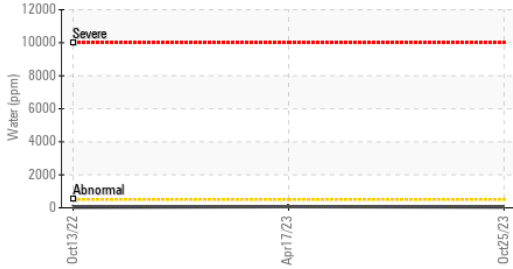
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.33</b>	0.37	0.33

# OIL ANALYSIS REPORT

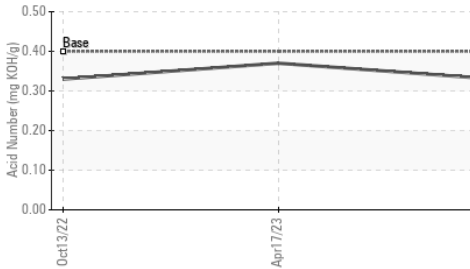
## ▲ Particle Trend



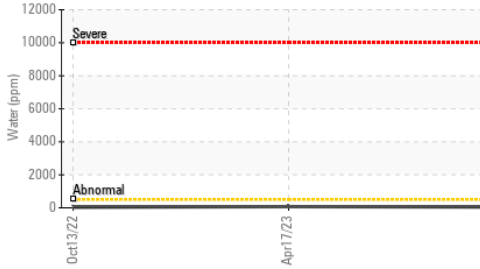
## Water (KF)



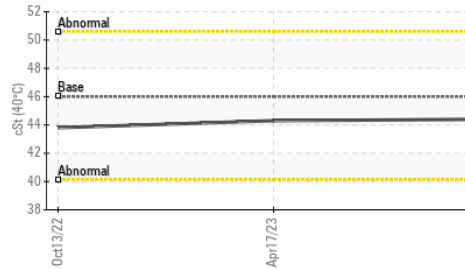
## Acid Number



## Water (KF)



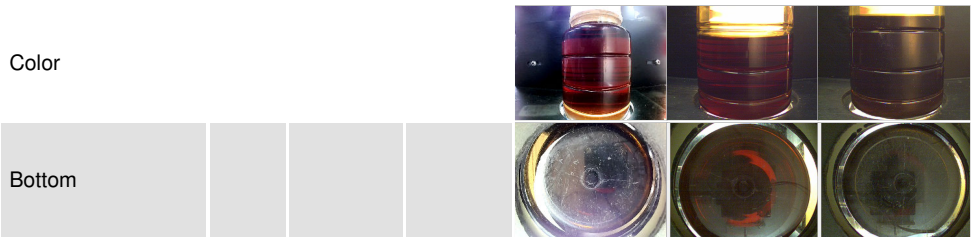
## Viscosity @ 40°C



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

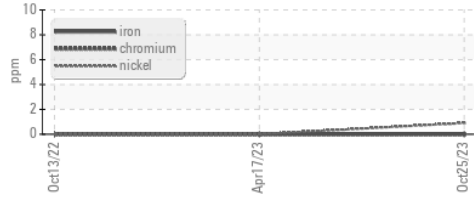
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.4	44.3	43.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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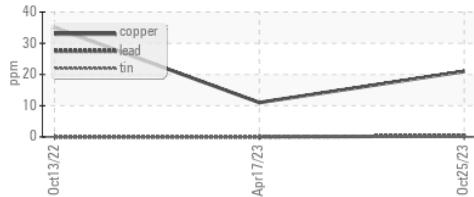


## GRAPHS

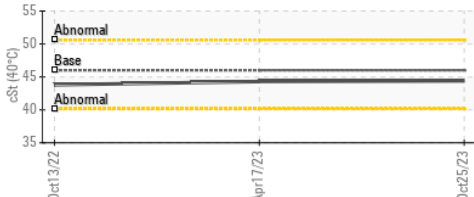
### Ferrous Alloys



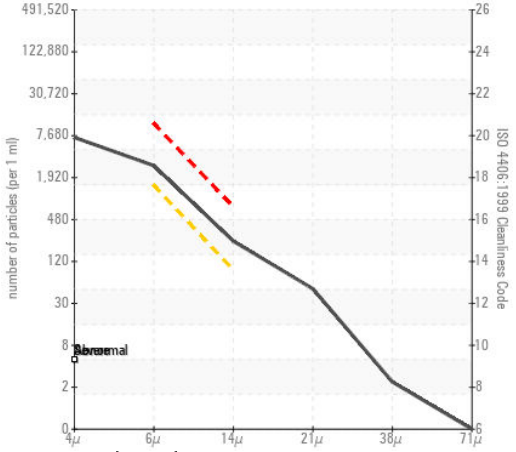
### Non-ferrous Metals



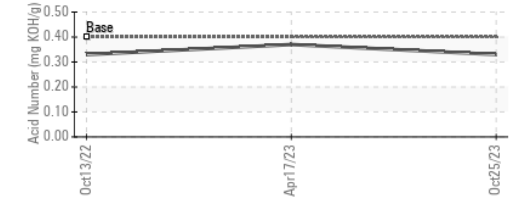
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KC124372 Received : 07 Nov 2023  
 Lab Number : 06000507 Diagnosed : 09 Nov 2023  
 Unique Number : 10728867 Diagnostician : Jonathan Hester  
 Test Package : IND 2

**WASHINGTON PENN PLASTICS**  
 2080 N MAIN ST  
 WASHINGTON, PA  
 US 15301  
 Contact:

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: