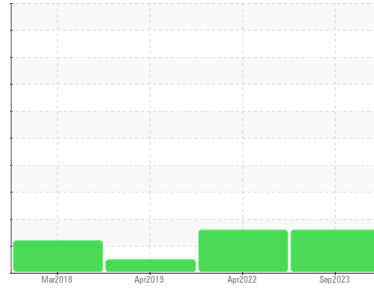




# PROBLEM SUMMARY

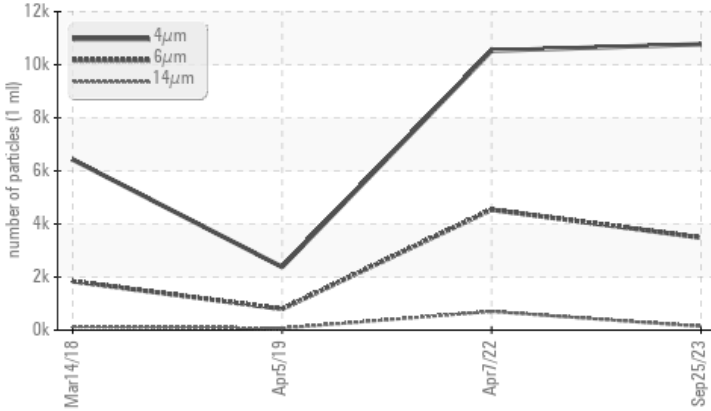
Sample Rating Trend



Machine Id  
**KAESER SK 15 5026391 (S/N 1633)**  
 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			ABNORMAL	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>3485</b>	▲ 4539	797
Particles >14µm	ASTM D7647	>80	▲ <b>141</b>	▲ 703	73
Particles >21µm	ASTM D7647	>20	▲ <b>45</b>	▲ 197	20
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/14</b>	▲ 19/17	17/13

Customer Id: BRMMEN  
 Sample No.: KCPA000605  
 Lab Number: 05968348  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 07 Apr 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



### 05 Apr 2019 Diag: Doug Bogart

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



### 14 Mar 2018 Diag: Jonathan Hester

ISO



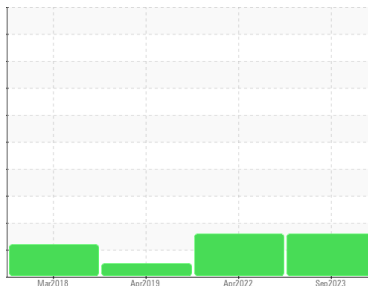
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id  
**KAESER SK 15 5026391 (S/N 1633)**

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 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>KCPA000605</b>	KCP44485	KCP18477
Sample Date	Client Info			<b>25 Sep 2023</b>	07 Apr 2022	05 Apr 2019
Machine Age	hrs	Client Info		<b>6586</b>	6074	3585
Oil Age	hrs	Client Info		<b>0</b>	1000	1800
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>5</b>	<1	<1
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>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	5
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

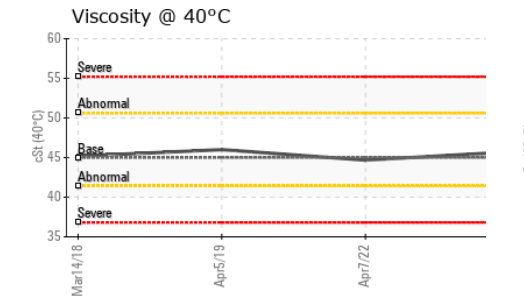
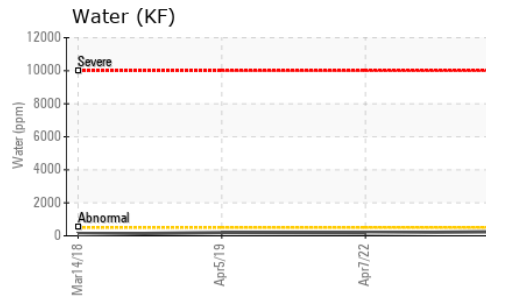
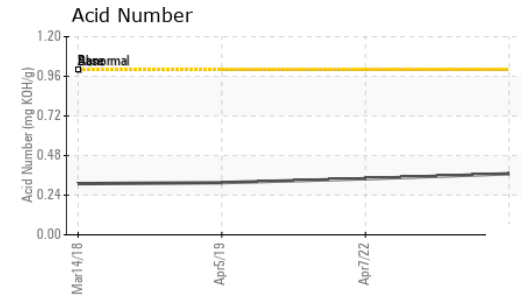
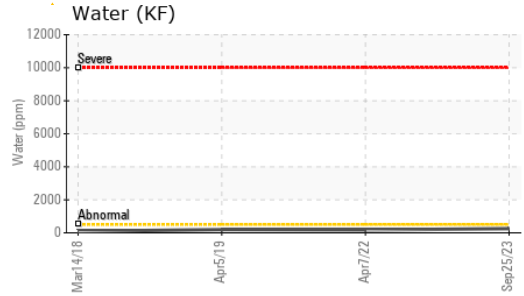
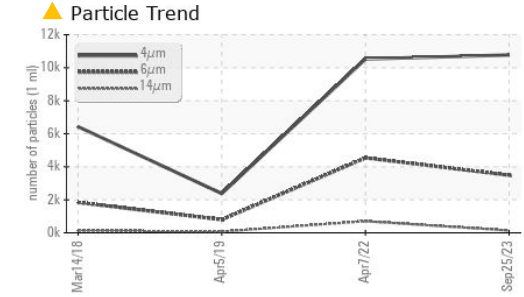
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185m	90	<b>33</b>	0	10
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>82</b>	79	67
Calcium	ppm	ASTM D5185m	0	<b>1</b>	1	1
Phosphorus	ppm	ASTM D5185m	0	<b>1</b>	12	2
Zinc	ppm	ASTM D5185m	0	<b>1</b>	2	11
Sulfur	ppm	ASTM D5185m	23500	<b>21536</b>	18771	23766

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>12</b>	15	21
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Water	%	ASTM D6304	>0.05	<b>0.025</b>	0.017	0.020
ppm Water	ppm	ASTM D6304	>500	<b>252.3</b>	172.9	200

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>10771</b>	10528	2379
Particles >6µm		ASTM D7647	>1300	<b>▲ 3485</b>	▲ 4539	797
Particles >14µm		ASTM D7647	>80	<b>▲ 141</b>	▲ 703	73
Particles >21µm		ASTM D7647	>20	<b>▲ 45</b>	▲ 197	20
Particles >38µm		ASTM D7647	>4	<b>4</b>	▲ 5	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 21/19/14</b>	▲ 19/17	17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.37</b>	0.34	0.316

# OIL ANALYSIS REPORT

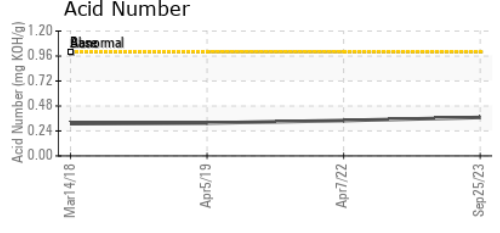
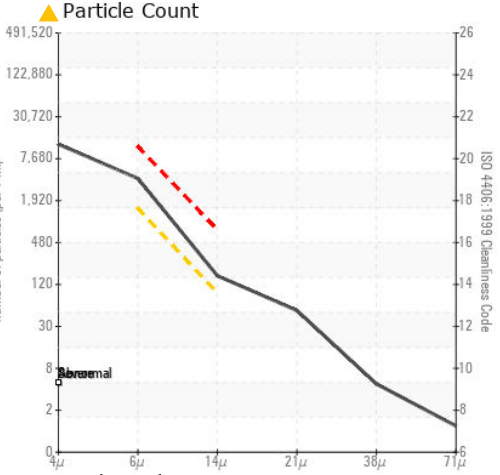
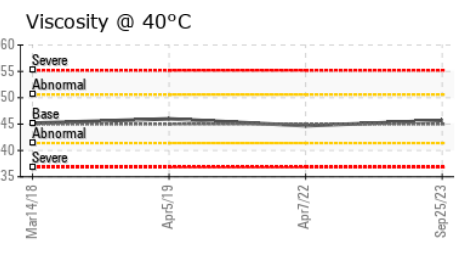
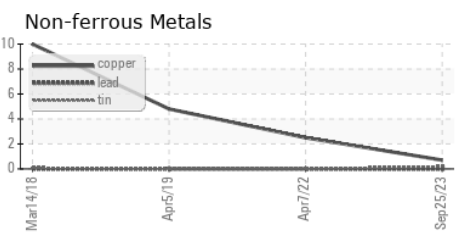
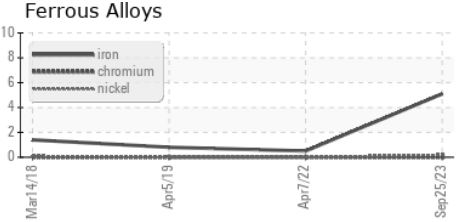


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 45	45.7	44.68	46.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA000605 **Received** : 03 Oct 2023  
**Lab Number** : 05968348 **Diagnosed** : 10 Oct 2023  
**Unique Number** : 10674899 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BR METAL TECHNOLOGY PLANT 1**  
W140N5426 LILLY RD  
MENOMONEE FALLS, WI  
US 53051  
Contact: MIKE

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)