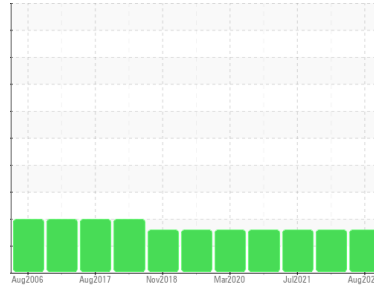




# PROBLEM SUMMARY

Sample Rating Trend



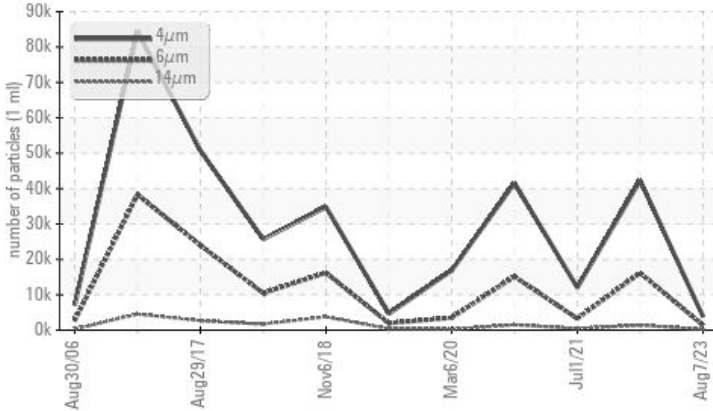
ISO



Machine Id  
**KAESER SM-11 2217766 (S/N 1276)**  
 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			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1425	▲ 16142	▲ 3265
Particles >14µm	ASTM D7647	>80	▲ 218	▲ 1388	▲ 440
Particles >21µm	ASTM D7647	>20	▲ 67	▲ 210	▲ 142
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/18/15	▲ 21/18	▲ 19/16

Customer Id: SEVWAT  
 Sample No.: KCPA004447  
 Lab Number: 05927850  
 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

### 02 Mar 2022 Diag: Angela Borella

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



### 01 Jul 2021 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



### 17 Nov 2020 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.

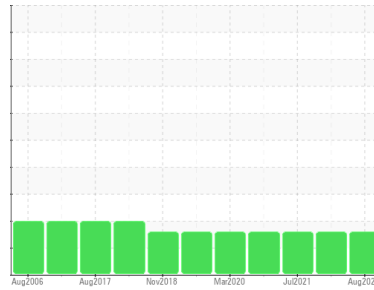
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM-11 2217766 (S/N 1276)**

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>KCPA004447</b>	KCP42013	KCP42363
Sample Date	Client Info			<b>07 Aug 2023</b>	02 Mar 2022	01 Jul 2021
Machine Age	hrs	Client Info		<b>54565</b>	50898	49451
Oil Age	hrs	Client Info		<b>0</b>	1447	1207
Oil Changed	Client Info			<b>N/A</b>	Changed	Not Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>5</b>	7	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

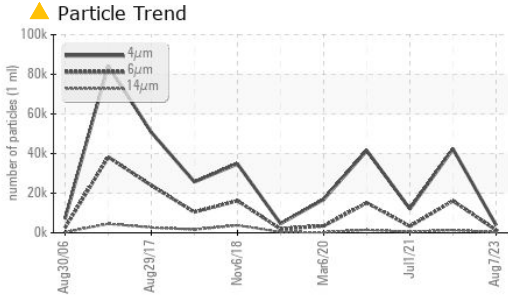
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	16
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	7
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	100	<b>7</b>	31	50
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	0	<b>4</b>	0	2
Zinc	ppm	ASTM D5185m	0	<b>6</b>	11	6
Sulfur	ppm	ASTM D5185m	23500	<b>21536</b>	18471	18836

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	1	<1
Sodium	ppm	ASTM D5185m		<b>1</b>	6	10
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Water	%	ASTM D6304	>0.05	<b>0.009</b>	0.008	0.023
ppm Water	ppm	ASTM D6304	>500	<b>95.1</b>	82.9	238.5

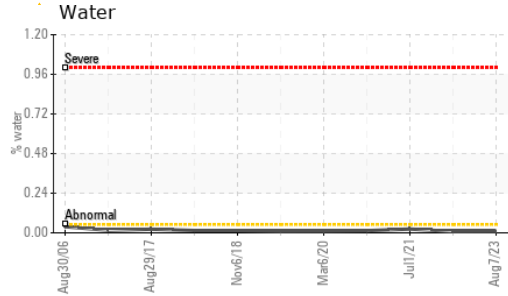
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>3865</b>	42310	12059
Particles >6µm		ASTM D7647	>1300	<b>▲ 1425</b>	▲ 16142	▲ 3265
Particles >14µm		ASTM D7647	>80	<b>▲ 218</b>	▲ 1388	▲ 440
Particles >21µm		ASTM D7647	>20	<b>▲ 67</b>	▲ 210	▲ 142
Particles >38µm		ASTM D7647	>4	<b>2</b>	▲ 11	▲ 9
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 19/18/15</b>	▲ 21/18	▲ 19/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.45</b>	0.46	0.390

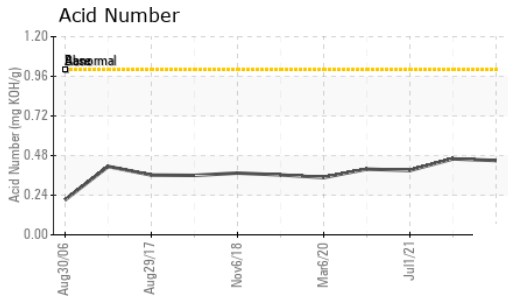
# OIL ANALYSIS REPORT



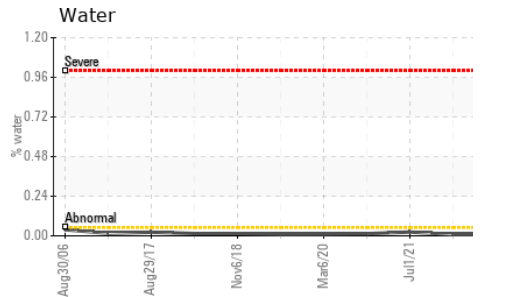
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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



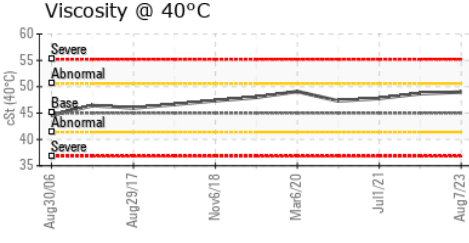
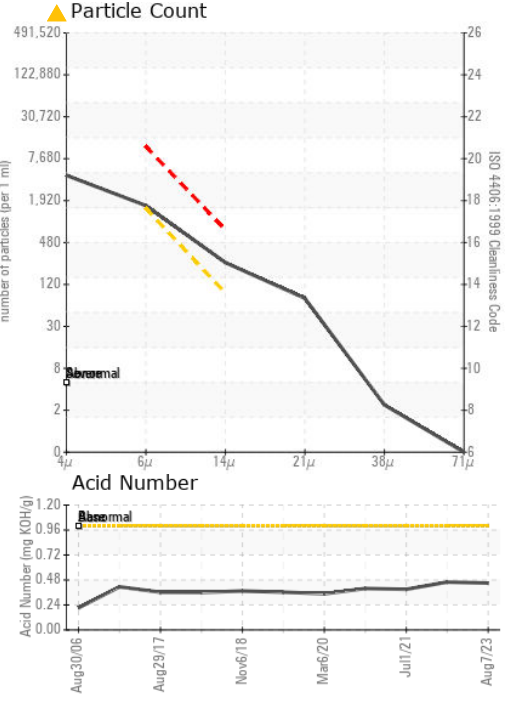
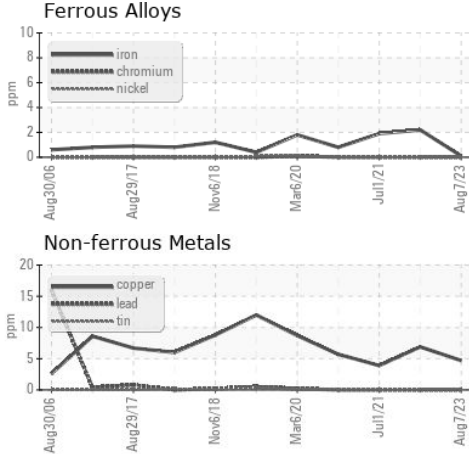
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.0	48.7



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004447 **Received** : 17 Aug 2023  
**Lab Number** : 05927850 **Diagnosed** : 18 Aug 2023  
**Unique Number** : 10607797 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SEVEN CYCLES**  
 125 WALNUT ST. ENTRANCE B  
 WATERTOWN, MA  
 US 02472  
 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: