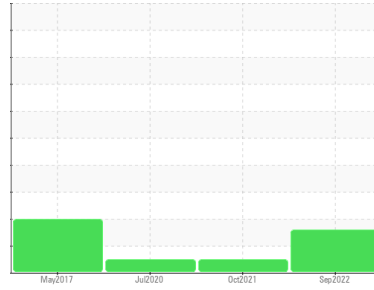


# PROBLEM SUMMARY

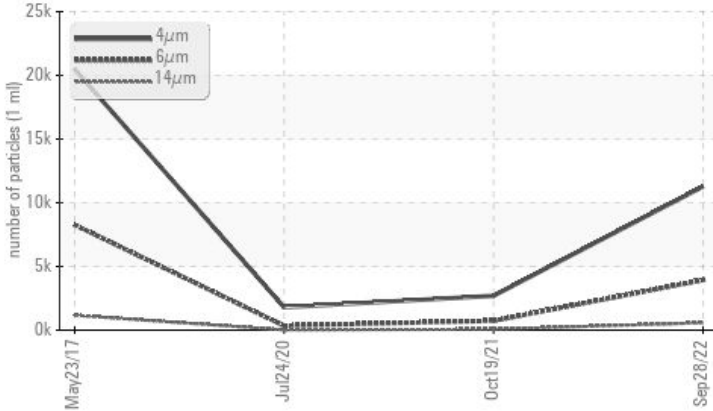
Sample Rating Trend



Machine Id  
**KAESER ASD 40T 4434235 (S/N 1103)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-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	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>3933</b>	733	341
Particles >14µm	ASTM D7647	>80	▲ <b>574</b>	69	17
Particles >21µm	ASTM D7647	>20	▲ <b>113</b>	16	4
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/16</b>	17/13	16/11

Customer Id: CRAPLA  
Sample No.: KCP46002  
Lab Number: 05664171  
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

### 19 Oct 2021 Diag: Doug Bogart

NORMAL



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 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



### 24 Jul 2020 Diag: Angela Borella

NORMAL



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. 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



### 23 May 2017 Diag: Don Baldrige

ISO



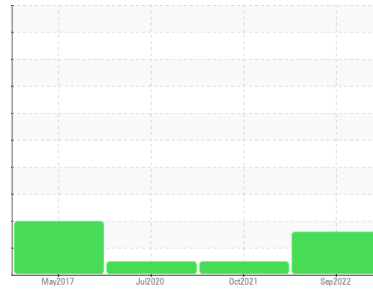
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**KAESER ASD 40T 4434235 (S/N 1103)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) M-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>KCP46002</b>	KCP36445	KCP10153
Sample Date	Client Info		<b>28 Sep 2022</b>	19 Oct 2021	24 Jul 2020
Machine Age	hrs	Client Info	<b>6903</b>	5876	5182
Oil Age	hrs	Client Info	<b>1027</b>	694	610
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR METALS

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

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	0
Barium	ppm	ASTM D5185m 90	6	0	7
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 100	77	80	80
Calcium	ppm	ASTM D5185m 0	1	0	1
Phosphorus	ppm	ASTM D5185m 0	7	5	1
Zinc	ppm	ASTM D5185m 0	5	0	3
Sulfur	ppm	ASTM D5185m 23500	24889	18795	18149

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	<1	1
Sodium	ppm	ASTM D5185m	23	27	18
Potassium	ppm	ASTM D5185m >20	4	3	0
Water	%	ASTM D6304 >0.05	0.025	0.014	0.035
ppm Water	ppm	ASTM D6304 >500	259.7	146.8	352.9

### FLUID CLEANLINESS

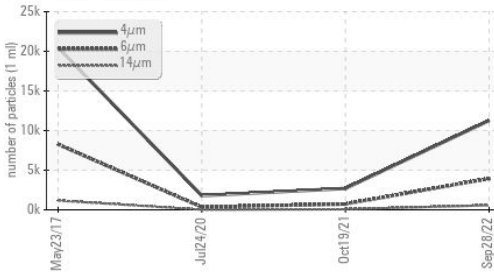
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>11270</b>	2696	1791
Particles >6µm	ASTM D7647	>1300	▲ <b>3933</b>	733	341
Particles >14µm	ASTM D7647	>80	▲ <b>574</b>	69	17
Particles >21µm	ASTM D7647	>20	▲ <b>113</b>	16	4
Particles >38µm	ASTM D7647	>4	2	2	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/16</b>	17/13	16/11

### FLUID DEGRADATION

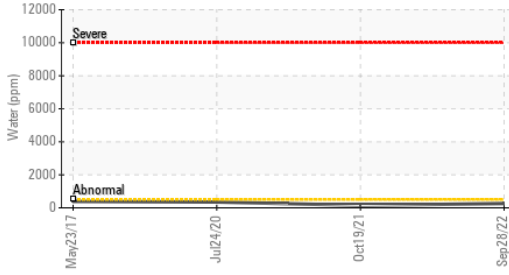
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.33</b>	0.289	0.390

# OIL ANALYSIS REPORT

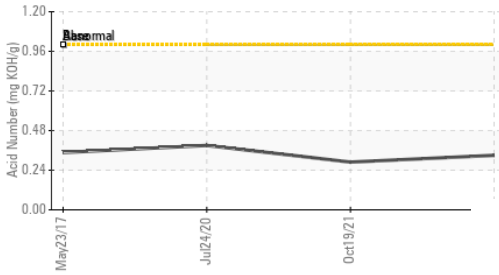
## Particle Trend



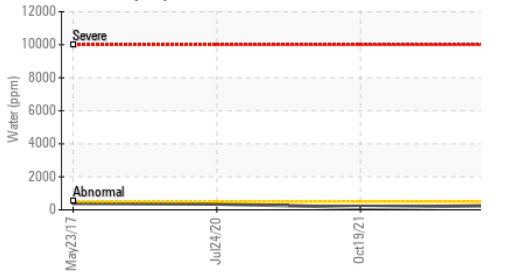
## Water (KF)



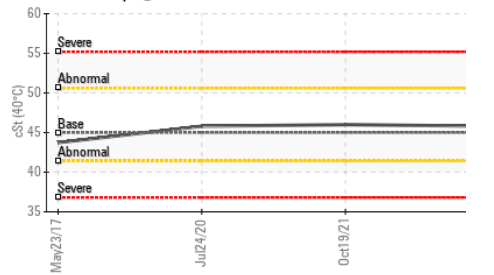
## Acid Number



## Water (KF)



## Viscosity @ 40°C

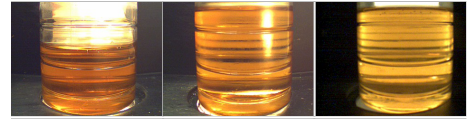


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

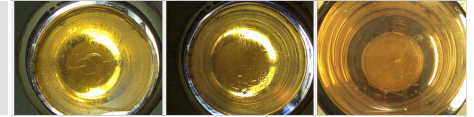
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	45.8	46.0	45.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

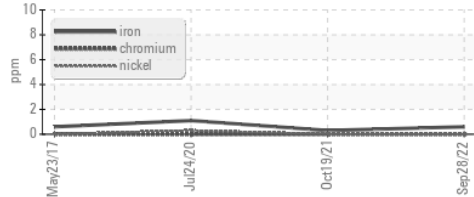


Bottom

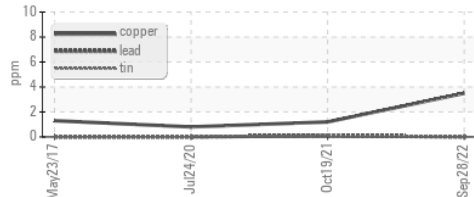


## GRAPHS

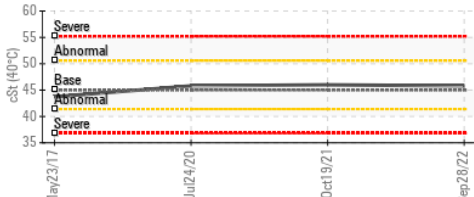
### Ferrous Alloys



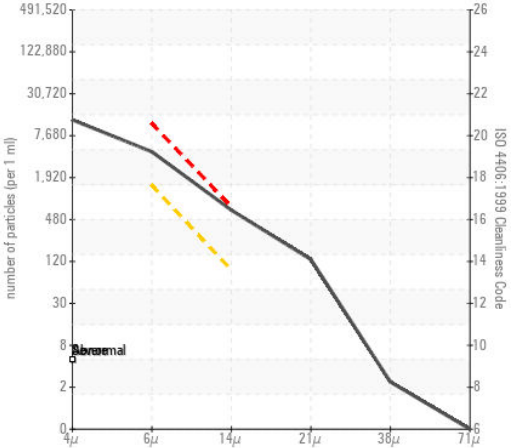
### Non-ferrous Metals



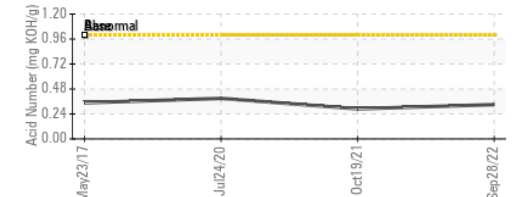
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KCP46002 Received : 11 Oct 2022  
 Lab Number : 05664171 Diagnosed : 13 Oct 2022  
 Unique Number : 10168740 Diagnostician : Jonathan Hester  
 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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 F: