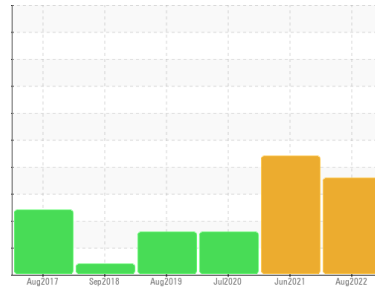


# PROBLEM SUMMARY

Sample Rating Trend



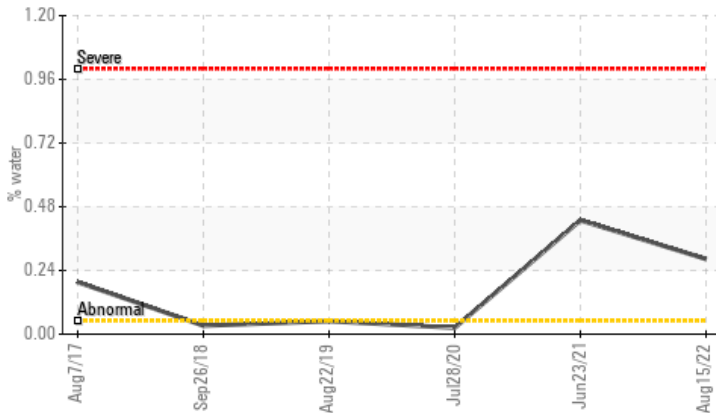
**WATER**



Machine Id  
**KAESER AIRTOWER 7.5C 5683183 (S/N 1538)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Water



## 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				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ <b>0.283</b>	▲ 0.429	0.024
ppm Water	ppm	ASTM D6304	>500	▲ <b>2830</b>	▲ 4290	240.0
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	▲ MODER	LIGHT
Free Water	scalar	*Visual		▲ <b>1.0</b>	▲ 1.0	NEG

Customer Id: METLIL  
Sample No.: KCP49937  
Lab Number: 05641635  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@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

### 23 Jun 2021 Diag: Angela Borella

WATER



The filter change at the time of sampling has been noted. We recommend an early resample IN 500 HOURS to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 28 Jul 2020 Diag: Doug Bogart

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 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](#)



### 22 Aug 2019 Diag: Doug Bogart

ISO



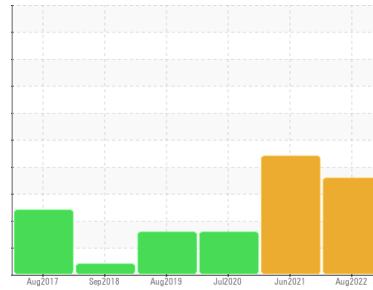
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The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

[view report](#)



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**KAESER AIRTOWER 7.5C 5683183 (S/N 1538)**

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

Moderate concentration of visible dirt/debris present in the oil. Free water present. There is a light concentration of water present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			<b>KCP49937</b>	KCP42183	KCP24442
Sample Date			<b>15 Aug 2022</b>	23 Jun 2021	28 Jul 2020
Machine Age	hrs		<b>1999</b>	1483	1086
Oil Age	hrs		<b>515</b>	400	400
Oil Changed			<b>Changed</b>	Not Changd	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>1</b>	<1	2
Chromium	ppm ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Titanium	ppm ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Lead	ppm ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm ASTM D5185m	>50	<b>21</b>	12	7
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185m		<b>---</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	history 1	history 2
Boron	ppm ASTM D5185m	0	<b>0</b>	17	12
Barium	ppm ASTM D5185m	90	<b>&lt;1</b>	0	0
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>8</b>	46	26
Calcium	ppm ASTM D5185m	0	<b>&lt;1</b>	0	1
Phosphorus	ppm ASTM D5185m	0	<b>4</b>	5	2
Zinc	ppm ASTM D5185m	0	<b>35</b>	6	21
Sulfur	ppm ASTM D5185m	23500	<b>18787</b>	19378	18105

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>2</b>	0	2
Sodium	ppm ASTM D5185m		<b>3</b>	4	9
Potassium	ppm ASTM D5185m	>20	<b>0</b>	0	<1
Water	% ASTM D6304	>0.05	<b>▲ 0.283</b>	▲ 0.429	0.024
ppm Water	ppm ASTM D6304	>500	<b>▲ 2830</b>	▲ 4290	240.0

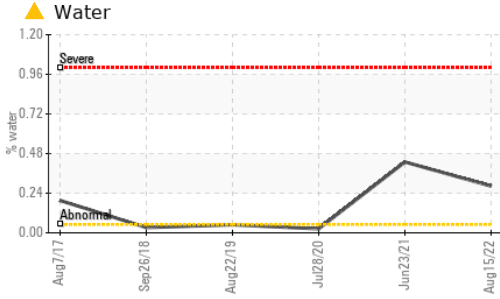
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>---</b>	---	7775
Particles >6µm	ASTM D7647	>1300	<b>---</b>	---	▲ 2119
Particles >14µm	ASTM D7647	>80	<b>---</b>	---	▲ 437
Particles >21µm	ASTM D7647	>20	<b>---</b>	---	▲ 183
Particles >38µm	ASTM D7647	>4	<b>---</b>	---	▲ 11
Particles >71µm	ASTM D7647	>3	<b>---</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>---</b>	---	▲ 18/16

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.0	<b>0.31</b>	0.356	0.365

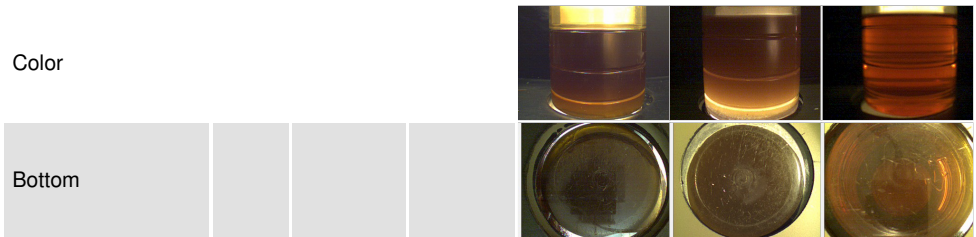
# OIL ANALYSIS REPORT



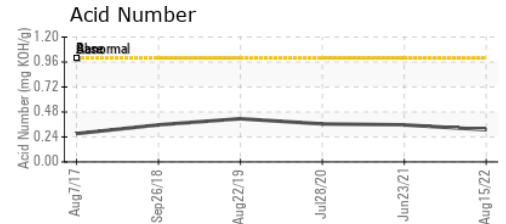
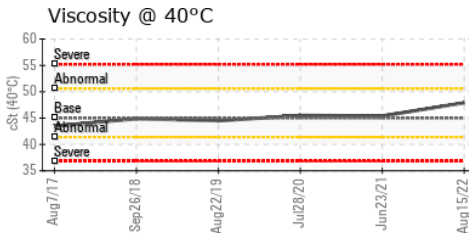
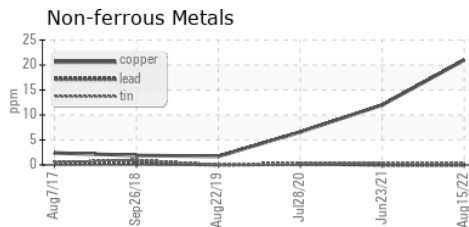
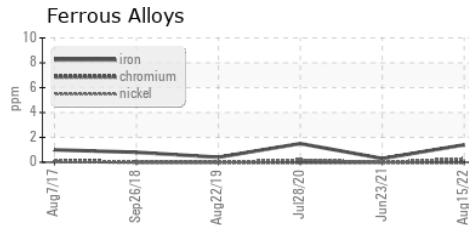
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	47.9	45.4

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP49937 **Received** : 14 Sep 2022  
**Lab Number** : 05641635 **Diagnosed** : 15 Sep 2022  
**Unique Number** : 10131165 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**METAL UNION SPEED SHOP**  
 5395 WEBB PKWY NW  
 LILBURN, GA  
 USA 30047  
 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: