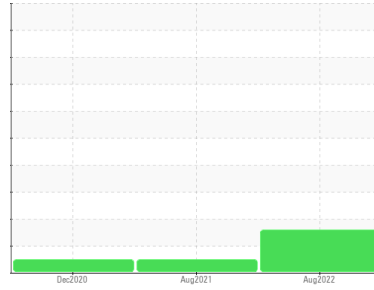


# PROBLEM SUMMARY

Sample Rating Trend



ISO



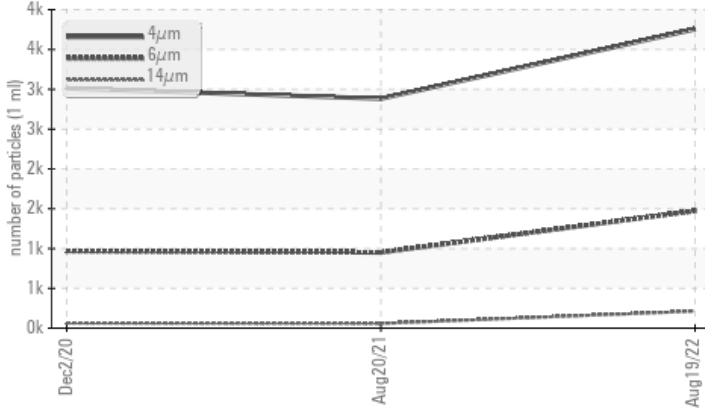
Machine Id  
**6953848 (S/N 1415)**

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. No corrective action is recommended at this time. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1472	951	968
Particles >14µm	ASTM D7647	>80	▲ 213	58	63
Particles >21µm	ASTM D7647	>20	▲ 49	14	22
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/18/15	17/13	17/13

Customer Id: MICBROFL  
Sample No.: KC93152  
Lab Number: 05629651  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

### 20 Aug 2021 Diag: Don Baldrige

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](#)



### 02 Dec 2020 Diag: Jonathan Hester

NORMAL



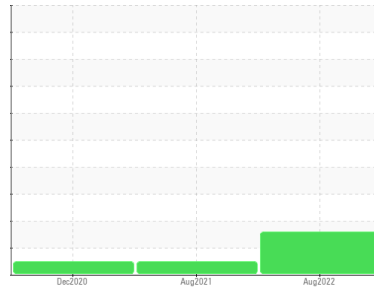
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



Machine Id  
**6953848 (S/N 1415)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**



## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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	history 1	history 2
Sample Number			<b>KC93152</b>	KC94220	KC77797
Sample Date			<b>19 Aug 2022</b>	20 Aug 2021	02 Dec 2020
Machine Age	hrs		<b>12303</b>	7568	5209
Oil Age	hrs		<b>4735</b>	3673	1314
Oil Changed			<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>0</b>	<1	<1
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>	0	0
Silver	ppm ASTM D5185m	>2	<b>0</b>	0	<1
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>10</b>	9	6
Tin	ppm ASTM D5185m	>10	<b>0</b>	0	0
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		<b>0</b>	11	9
Barium	ppm ASTM D5185m	90	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m		<b>0</b>	0	0
Manganese	ppm ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm ASTM D5185m	90	<b>0</b>	2	43
Calcium	ppm ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm ASTM D5185m		<b>&lt;1</b>	2	4
Zinc	ppm ASTM D5185m		<b>0</b>	3	14

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>0</b>	<1	<1
Sodium	ppm ASTM D5185m		<b>0</b>	1	22
Potassium	ppm ASTM D5185m	>20	<b>0</b>	<1	4
Water	% ASTM D6304	>0.05	<b>0.009</b>	0.007	0.017
ppm Water	ppm ASTM D6304	>500	<b>96.4</b>	79.5	175.0

## FLUID CLEANLINESS

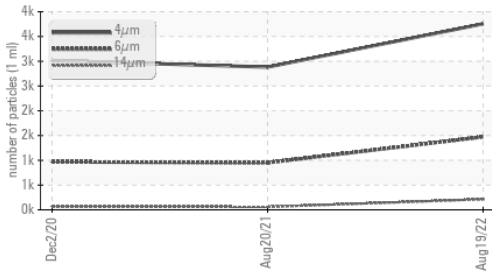
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>3755</b>	2882	3012
Particles >6µm	ASTM D7647	>1300	<b>▲ 1472</b>	951	968
Particles >14µm	ASTM D7647	>80	<b>▲ 213</b>	58	63
Particles >21µm	ASTM D7647	>20	<b>▲ 49</b>	14	22
Particles >38µm	ASTM D7647	>4	<b>3</b>	2	2
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 19/18/15</b>	17/13	17/13

## FLUID DEGRADATION

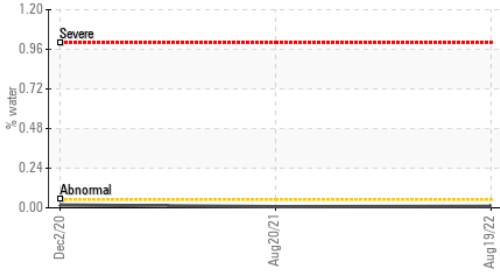
	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	0.4	<b>0.32</b>	0.317	0.269

# OIL ANALYSIS REPORT

## ▲ Particle Trend



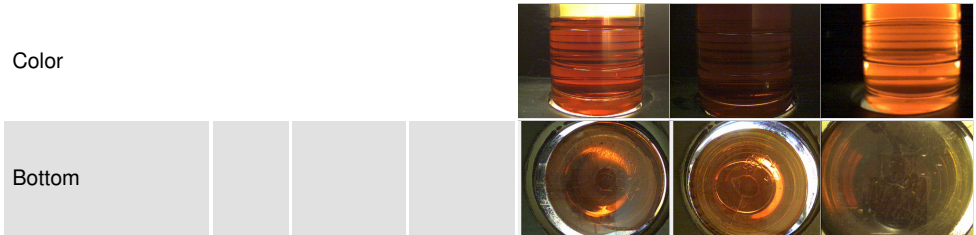
## Water



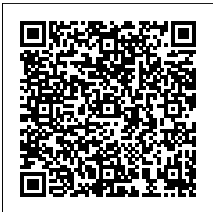
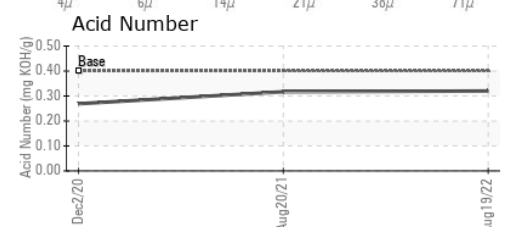
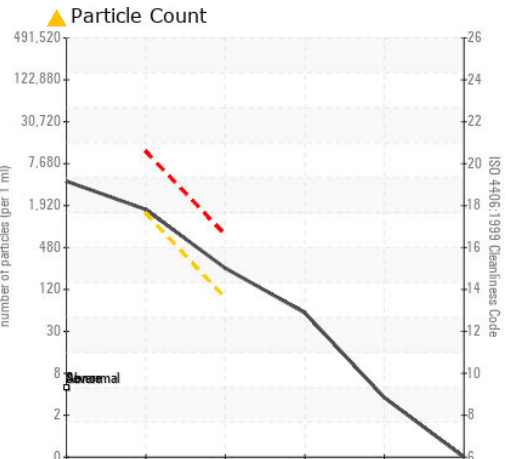
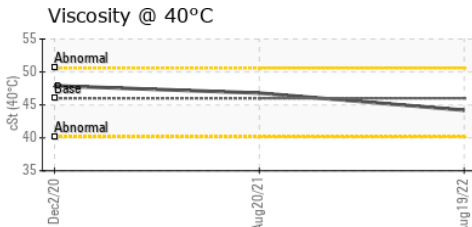
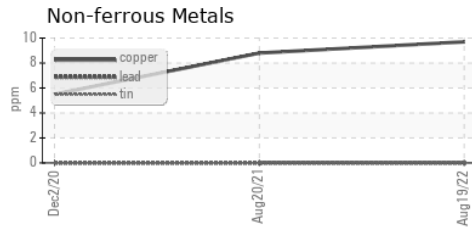
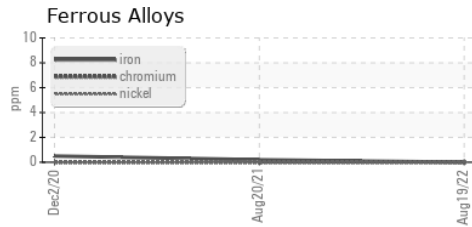
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	<b>44.2</b>	46.8	47.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC93152 **Received** : 29 Aug 2022  
**Lab Number** : 05629651 **Diagnosed** : 31 Aug 2022  
**Unique Number** : 10114172 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**MICRO MATIC USA LLC**  
 2386 SIMON CT  
 BROOKSVILLE, FL  
 USA 34604  
 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: