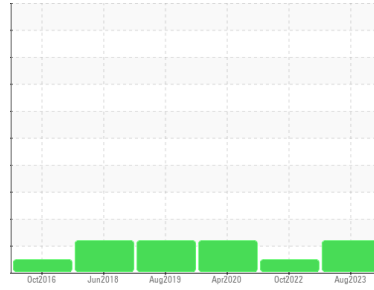




# PROBLEM SUMMARY

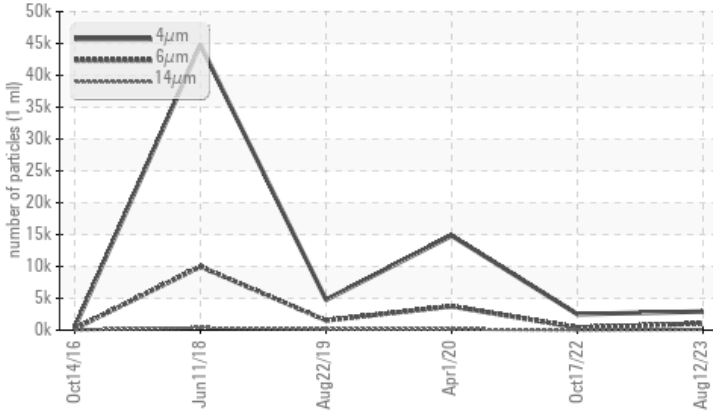
Sample Rating Trend



Area  
**[128208]**  
 Machine Id  
**KAESER BSD 50 5667465 (S/N 1569)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	ABNORMAL
Particles >14µm	ASTM D7647	>80	▲ 102	23	▲ 154
Particles >21µm	ASTM D7647	>20	▲ 25	7	▲ 27
Oil Cleanliness	ISO 4406 (c)	>17/13	▲ 17/14	16/12	▲ 19/14

Customer Id: TRECLE  
 Sample No.: KC70858  
 Lab Number: 05935388  
 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

### 17 Oct 2022 Diag: Angela Borella

NORMAL



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



### 01 Apr 2020 Diag: Don Baldrige

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



### 22 Aug 2019 Diag: Jonathan Hester

ISO



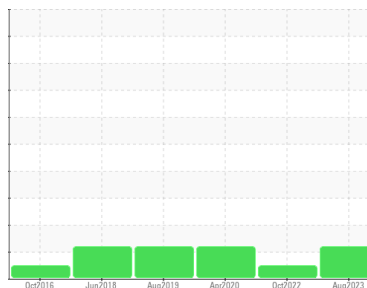
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid.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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**[128208]**  
Machine Id  
**KAESER BSD 50 5667465 (S/N 1569)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate 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>KC70858</b>	KC107948	KC64313
Sample Date	Client Info	<b>12 Aug 2023</b>	17 Oct 2022	01 Apr 2020
Machine Age	hrs	<b>55335</b>	49319	27373
Oil Age	hrs	<b>11988</b>	5972	5202
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changd
Sample Status		<b>ATTENTION</b>	NORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<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	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	1	1
Lead	ppm	ASTM D5185m >10	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m >50	<b>3</b>	0	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	2
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	9
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>0</b>	<1	12
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	17	<1
Zinc	ppm	ASTM D5185m	<b>0</b>	0	2

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	0
Water	%	ASTM D6304 >0.05	<b>0.007</b>	0.009	0.006
ppm Water	ppm	ASTM D6304 >500	<b>70.9</b>	97.2	65.8

## FLUID CLEANLINESS

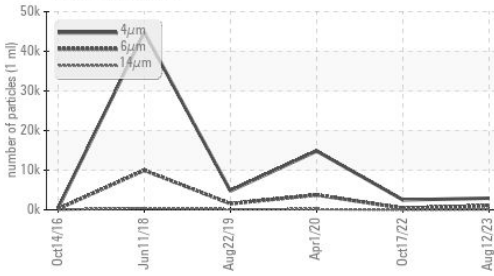
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>2924</b>	2503	14828
Particles >6µm	ASTM D7647 >1300	<b>1041</b>	406	▲ 3750
Particles >14µm	ASTM D7647 >80	▲ <b>102</b>	23	▲ 154
Particles >21µm	ASTM D7647 >20	▲ <b>25</b>	7	▲ 27
Particles >38µm	ASTM D7647 >4	<b>1</b>	0	3
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c) >17/13	▲ <b>17/14</b>	16/12	▲ 19/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.35</b>	0.40	0.448

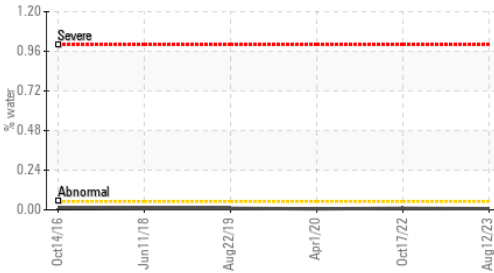
# OIL ANALYSIS REPORT

## ▲ Particle Trend



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

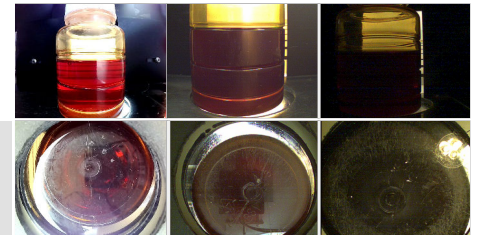
## Water



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46	<b>44.8</b>	44.5	44.6

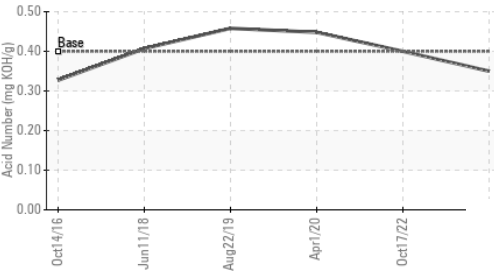
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

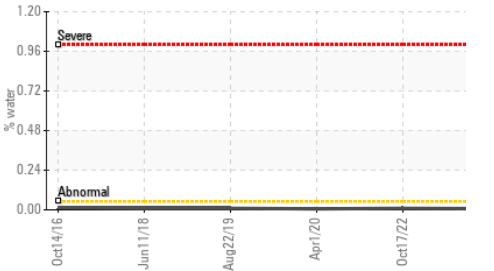


Bottom

## Acid Number

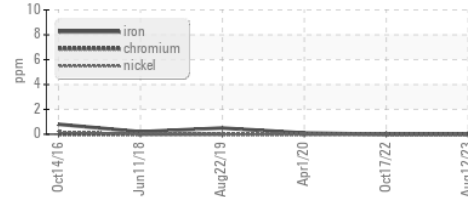


## Water

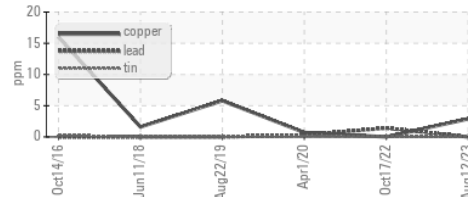


## GRAPHS

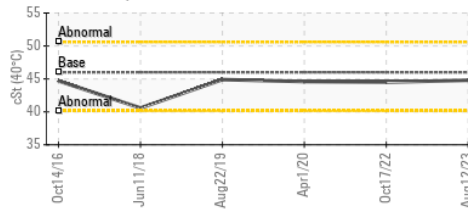
### Ferrous Alloys



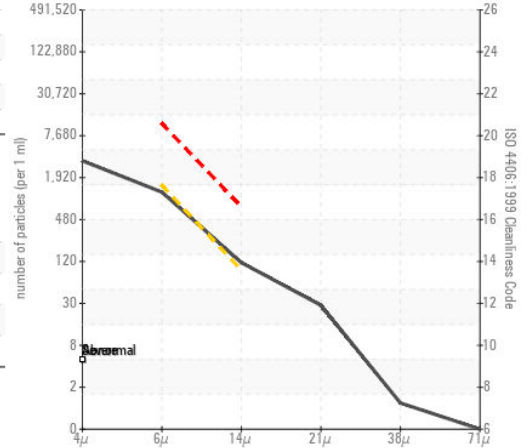
### Non-ferrous Metals



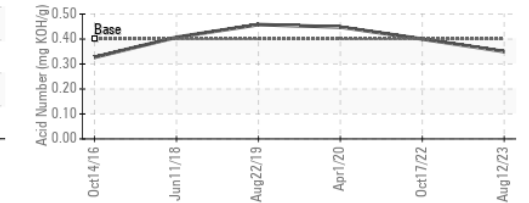
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC70858 **Received** : 25 Aug 2023  
**Lab Number** : 05935388 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10620659 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**TREMCO**  
 3361 E 80TH ST  
 CLEVELAND, OH  
 US 44127  
 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: