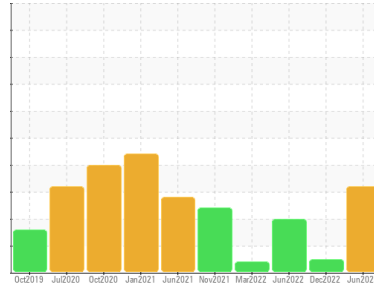




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**



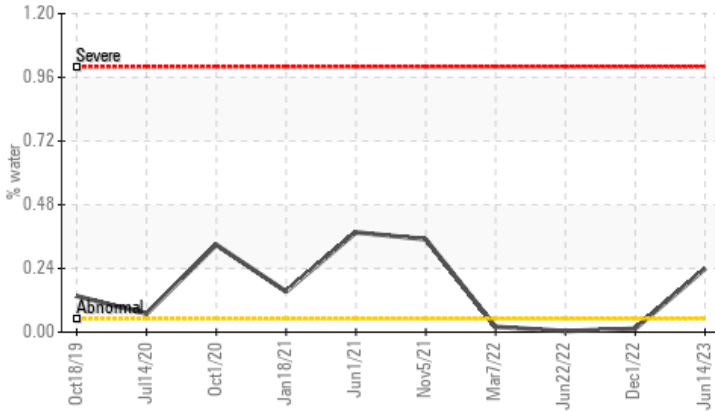
Machine Id  
**KAESER BSD 50 6474473 (S/N 1088)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

▲ Water



## RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ <b>0.239</b>	0.013	0.004
ppm Water	ppm	ASTM D6304	>500	▲ <b>2393.3</b>	132.5	43.5
Silt	scalar	*Visual	NONE	▲ <b>MODER</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ <b>HAZY</b>	NORML	NORML

Customer Id: EASRAL  
 Sample No.: KCPA005464  
 Lab Number: 05876267  
 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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

### 01 Dec 2022 Diag: Don Baldrige

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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 22 Jun 2022 Diag: Don Baldrige

ISO



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. 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



### 07 Mar 2022 Diag: Don Baldrige

ISO



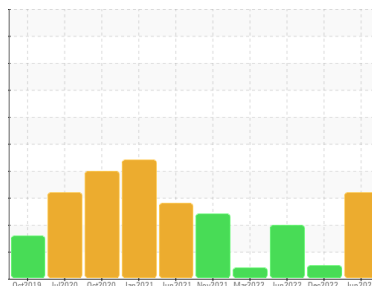
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id  
**KAESER BSD 50 6474473 (S/N 1088)**

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



**DIAGNOSIS**

**Recommendation**

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

**Wear**

All component wear rates are normal.

**Contamination**

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

**Fluid Condition**

The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA005464</b>	KCP49425	KCP41438
Sample Date	Client Info		<b>14 Jun 2023</b>	01 Dec 2022	22 Jun 2022
Machine Age	hrs	Client Info	<b>16454</b>	14150	12515
Oil Age	hrs	Client Info	<b>0</b>	1635	1702
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
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	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>12</b>	9	12
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	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	1
Barium	ppm	ASTM D5185m 90	<b>5</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>6</b>	20	1
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	3	0
Phosphorus	ppm	ASTM D5185m	<b>1</b>	8	3
Zinc	ppm	ASTM D5185m	<b>56</b>	74	38
Sulfur	ppm	ASTM D5185m	<b>19938</b>	21451	17769

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	20	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	5	0
Water	%	ASTM D6304 >0.05	<b>▲ 0.239</b>	0.013	0.004
ppm Water	ppm	ASTM D6304 >500	<b>▲ 2393.3</b>	132.5	43.5

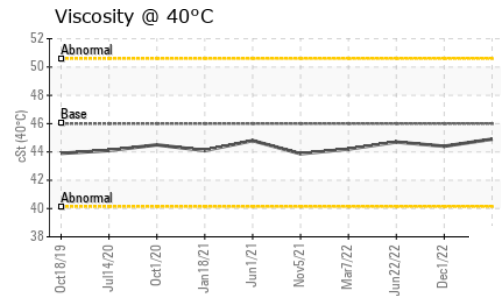
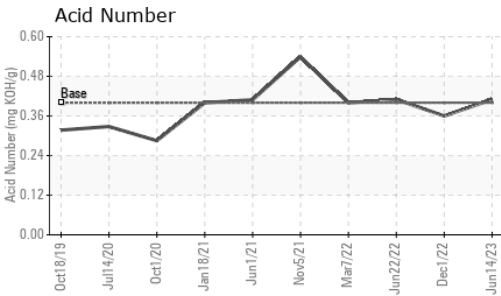
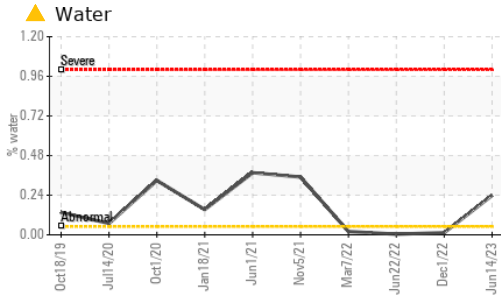
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>---</b>	2962	22046
Particles >6µm	ASTM D7647 >1300		<b>---</b>	814	▲ 4262
Particles >14µm	ASTM D7647 >80		<b>---</b>	68	▲ 245
Particles >21µm	ASTM D7647 >20		<b>---</b>	34	▲ 70
Particles >38µm	ASTM D7647 >4		<b>---</b>	5	▲ 5
Particles >71µm	ASTM D7647 >3		<b>---</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>---</b>	19/17/13	▲ 22/19/15

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.41</b>	0.36	0.41

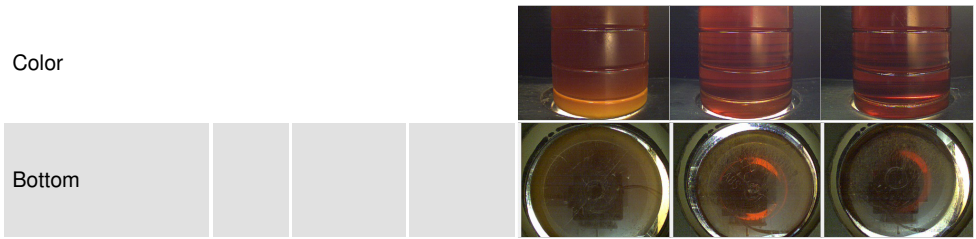
# OIL ANALYSIS REPORT



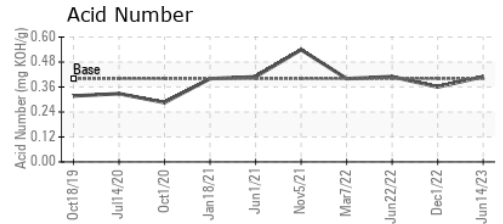
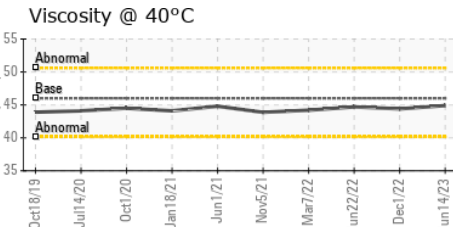
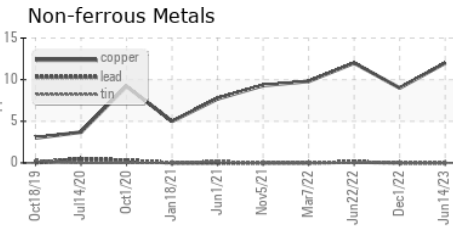
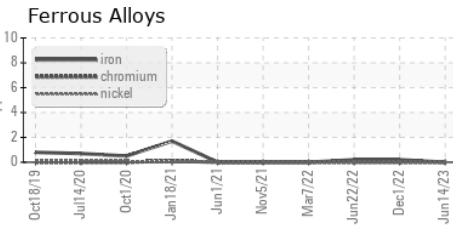
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	▲ HAZY	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	46	44.9	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA005464 **Received** : 16 Jun 2023  
**Lab Number** : 05876267 **Diagnosed** : 19 Jun 2023  
**Unique Number** : 10521370 **Diagnostician** : Don Baldrige

**EAST CAROLINA METAL TREATING**  
 1117 CAPITAL BLVD  
 RALEIGH, NC  
 US 27603  
 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: