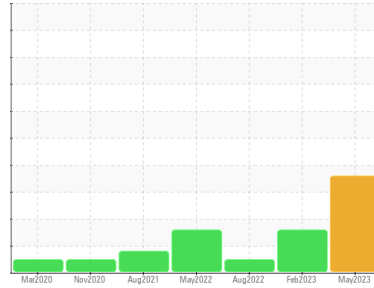




# PROBLEM SUMMARY

Sample Rating Trend



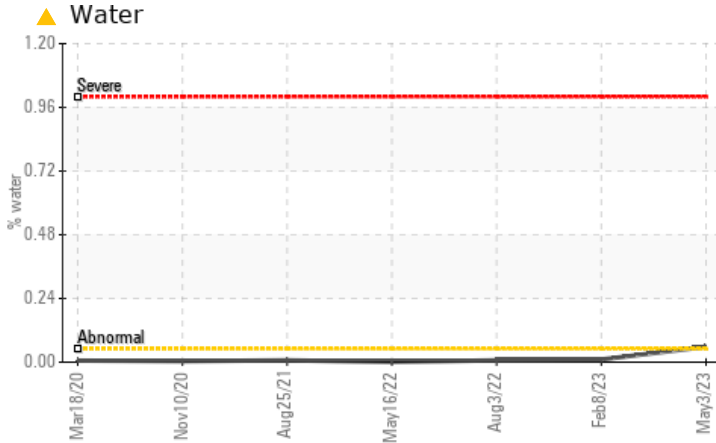
**WATER**



Machine Id  
**KAESER 6477340**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We recommend you service the filters on this component. 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				<b>ABNORMAL</b>	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	<b>▲ 0.058</b>	0.010	0.007
ppm Water	ppm	ASTM D6304	>500	<b>▲ 580</b>	103.6	78.7
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	LIGHT	LIGHT
Free Water	scalar	*Visual		<b>▲ 1.0</b>	NEG	NEG

Customer Id: USWTAM  
Sample No.: KC110767  
Lab Number: 05850201  
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 Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

### 08 Feb 2023 Diag: Don Baldrige

ISO



We recommend you service the filters on this component. 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



### 03 Aug 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



### 16 May 2022 Diag: Jonathan Hester

ISO



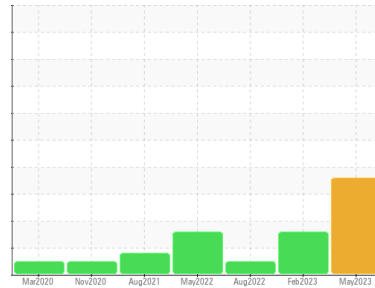
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**KAESER 6477340**

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

**DIAGNOSIS**

**▲ Recommendation**

We recommend you service the filters on this component. 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**

Free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris 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>KC110767</b>	KC98101	KC97026
Sample Date	Client Info			<b>03 May 2023</b>	08 Feb 2023	03 Aug 2022
Machine Age	hrs	Client Info		<b>23048</b>	21090	17419
Oil Age	hrs	Client Info		<b>0</b>	5525	1454
Oil Changed	Client Info			<b>Not Changed</b>	Not Changd	Not Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	0
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>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>20</b>	21	14
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

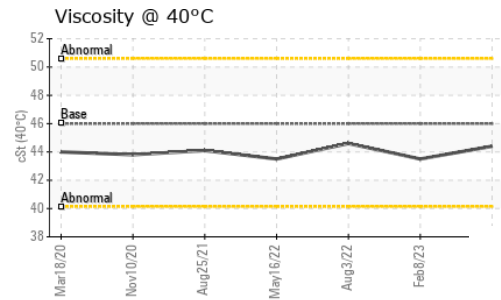
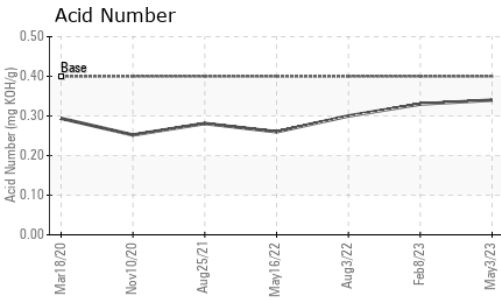
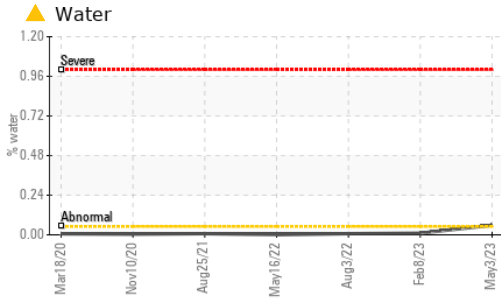
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	90	<b>&lt;1</b>	8	0
Calcium	ppm	ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	9	4
Zinc	ppm	ASTM D5185m		<b>0</b>	18	5

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	1	<1
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>▲ 0.058</b>	0.010	0.007
ppm Water	ppm	ASTM D6304	>500	<b>▲ 580</b>	103.6	78.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	7202	2032
Particles >6µm		ASTM D7647	>1300	---	▲ 2612	665
Particles >14µm		ASTM D7647	>80	---	▲ 270	18
Particles >21µm		ASTM D7647	>20	---	▲ 73	2
Particles >38µm		ASTM D7647	>4	---	3	0
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 20/19/15	18/17/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.34</b>	0.33	0.30

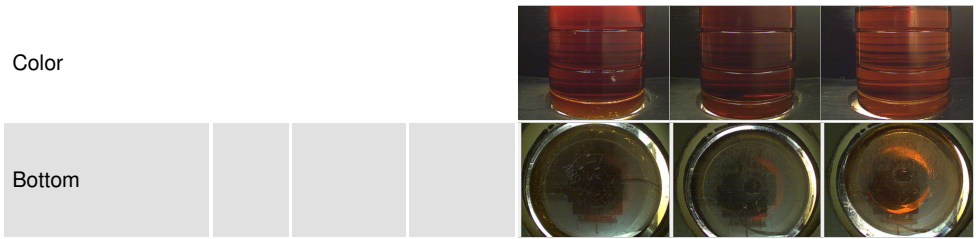
# OIL ANALYSIS REPORT



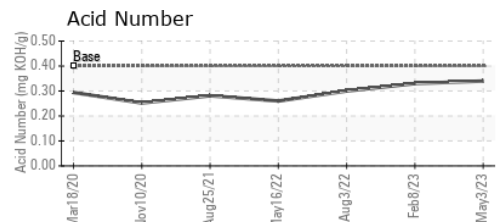
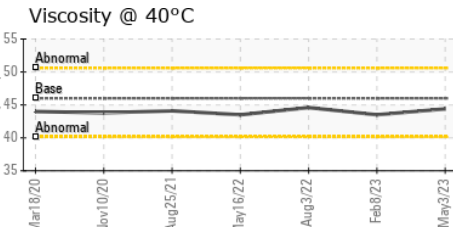
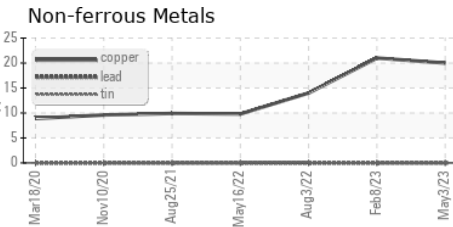
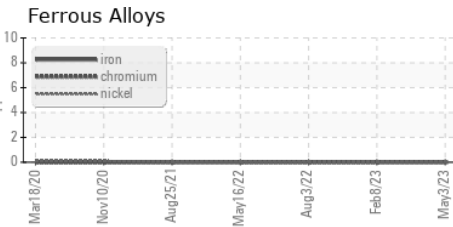
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.4	43.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC110767 **Received** : 17 May 2023  
**Lab Number** : 05850201 **Diagnosed** : 22 May 2023  
**Unique Number** : 10479556 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**US WATER SERVICE**  
 9109 BAYSHORE BLVD  
 TAMPA, FL  
 US 33629  
 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)