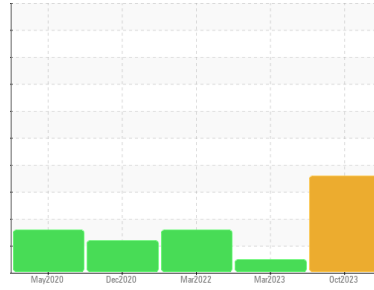




# PROBLEM SUMMARY

Sample Rating Trend



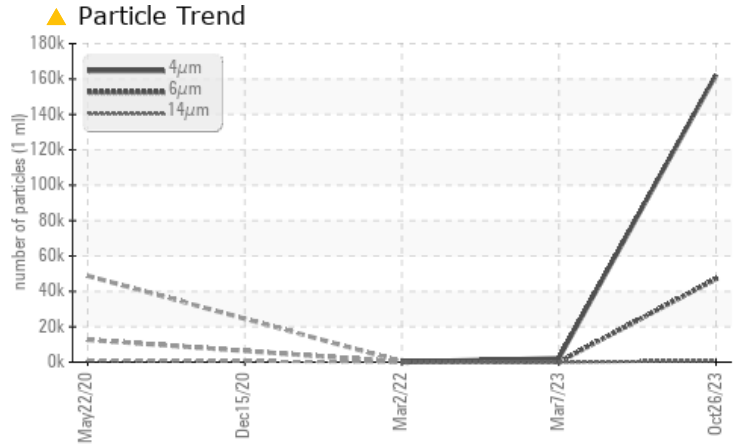
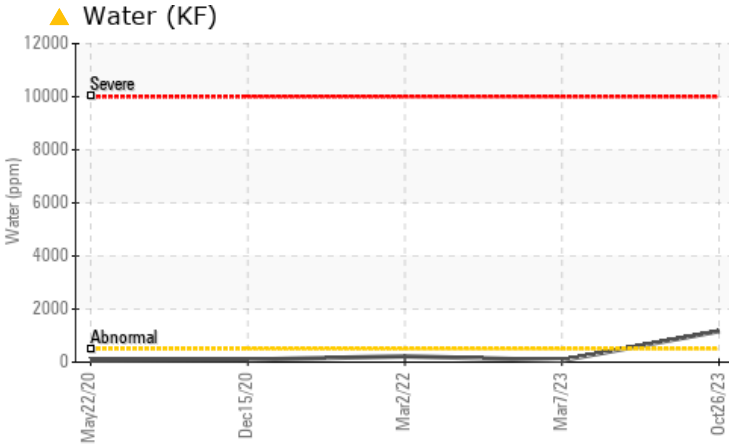
**WATER**



Machine Id  
**KAESER 6177744**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

The filter change at the time of sampling has been noted. 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>0.117</b>	0.006	0.022
ppm Water	ppm	ASTM D6304	>500	▲ <b>1170</b>	65.1	220.3
Particles >6µm		ASTM D7647	>1300	▲ <b>47026</b>	90	58
Particles >14µm		ASTM D7647	>80	▲ <b>850</b>	4	10
Particles >21µm		ASTM D7647	>20	▲ <b>384</b>	2	4
Particles >38µm		ASTM D7647	>4	▲ <b>28</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>25/23/17</b>	18/14/9	13/10

Customer Id: SOUQUI  
Sample No.: KCPA006572  
Lab Number: 06001057  
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

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

### 07 Mar 2023 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 Mar 2022 Diag: Doug Bogart

#### DEGRADATION



We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. 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 above the recommended limit. The oil viscosity is higher than normal.

view report



### 15 Dec 2020 Diag: Jonathan Hester

#### WEAR



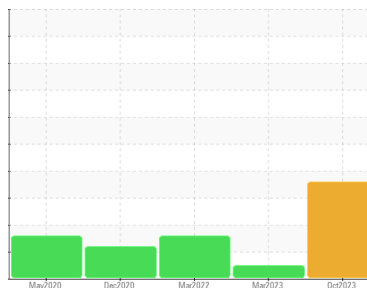
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. The copper level is abnormal. All other component wear rates are normal. Moderate concentration of visible dirt/debris 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 6177744**

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



## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. 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

There is a high amount of particulates 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. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA006572</b>	KCPA001235	KCP35186
Sample Date	Client Info			<b>26 Oct 2023</b>	07 Mar 2023	02 Mar 2022
Machine Age	hrs	Client Info		<b>42140</b>	33021	28582
Oil Age	hrs	Client Info		<b>0</b>	0	10603
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>3</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>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>36</b>	16	6
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	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

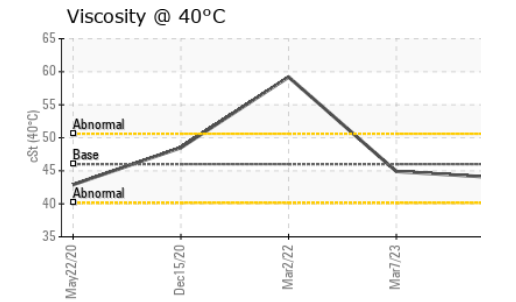
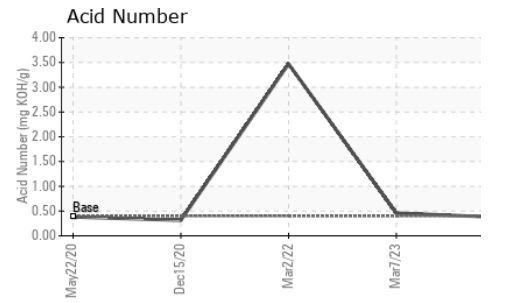
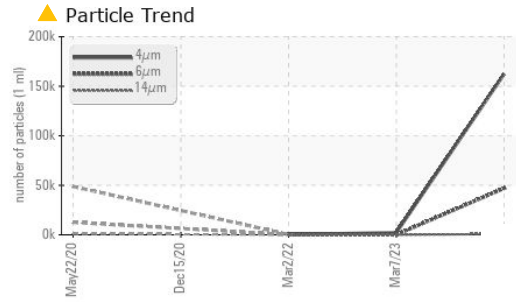
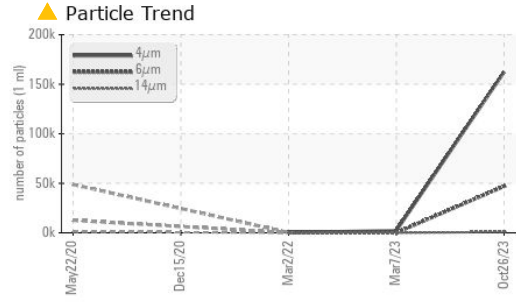
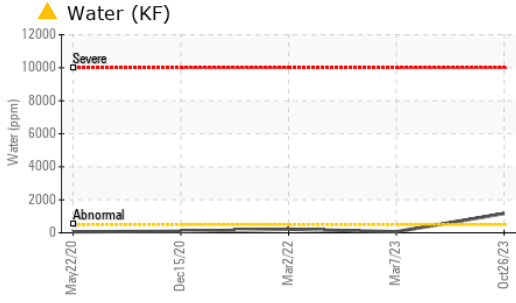
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	1
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	90	<b>&lt;1</b>	<1	3
Calcium	ppm	ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	2	8
Zinc	ppm	ASTM D5185m		<b>0</b>	<1	0
Sulfur	ppm	ASTM D5185m		<b>9835</b>	7665	2912

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>2</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>▲ 0.117</b>	0.006	0.022
ppm Water	ppm	ASTM D6304	>500	<b>▲ 1170</b>	65.1	220.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>162343</b>	2180	262
Particles >6µm		ASTM D7647	>1300	<b>▲ 47026</b>	90	58
Particles >14µm		ASTM D7647	>80	<b>▲ 850</b>	4	10
Particles >21µm		ASTM D7647	>20	<b>▲ 384</b>	2	4
Particles >38µm		ASTM D7647	>4	<b>▲ 28</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>2</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 25/23/17</b>	18/14/9	13/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.37</b>	0.46	<b>▲ 3.47</b>

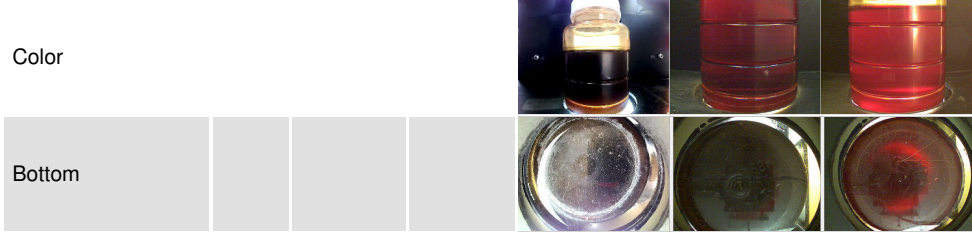
# OIL ANALYSIS REPORT



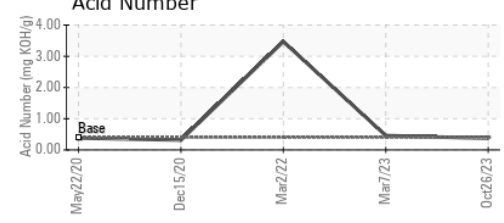
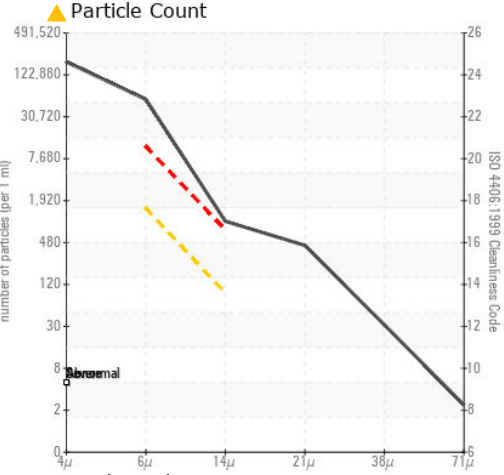
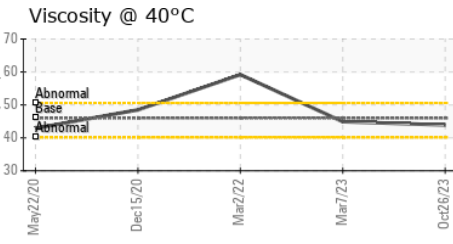
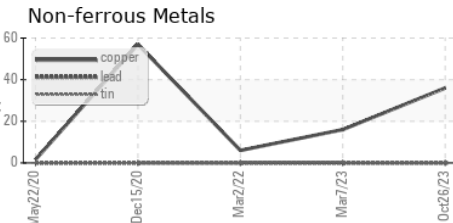
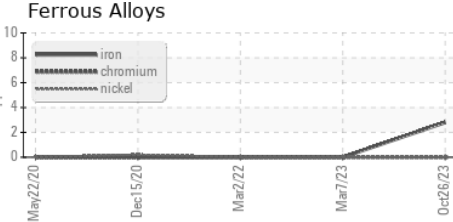
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	43.9	44.9 ▲ 59.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006572 **Received** : 07 Nov 2023  
**Lab Number** : 06001057 **Diagnosed** : 14 Nov 2023  
**Unique Number** : 10729417 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SOUTH BROOKS CO**  
 3600 THOMPSON RD  
 QUITMAN, GA  
 US 31643  
 Contact: MICAH BEODDY  
 MICAH.BEODDY@GMAIL.COM

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)