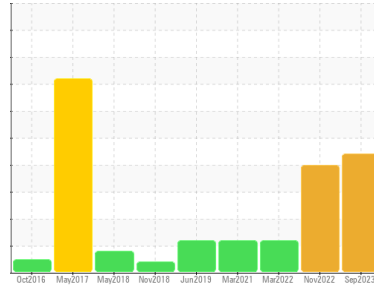




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**



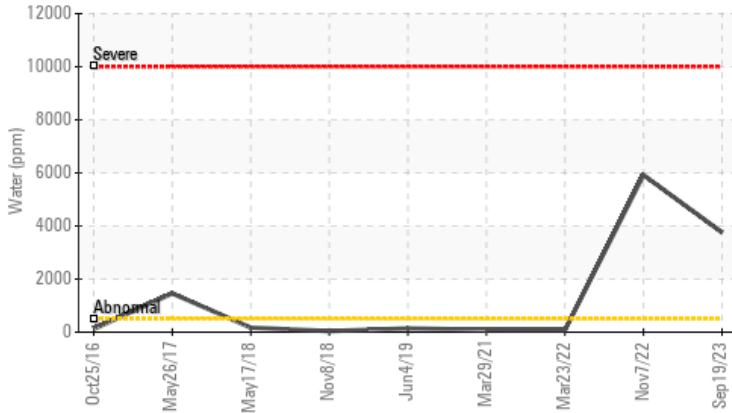
Machine Id  
**KAESER AS 20T 4648670 (S/N 1085)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

### ▲ Water (KF)



## 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. There is too much water present in this sample to perform a particle count. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ <b>0.376</b>	▲ 0.592	0.008
ppm Water	ppm	ASTM D6304	>500	▲ <b>3760</b>	▲ 5920	82.0
Debris	scalar	*Visual	NONE	▲ <b>MODER</b>	VLITE	NONE
Appearance	scalar	*Visual	NORML	▲ <b>LAYRD</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ <b>0.2%</b>	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ <b>&gt;10%</b>	▲ 1.0	NEG

Customer Id: BARGRO  
Sample No.: KCPA006156  
Lab Number: 05960614  
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 Nov 2022 Diag: Don Baldrige

WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. There is too much water present in this sample to perform a particle count. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

view report



### 23 Mar 2022 Diag: Doug Bogart

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 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



### 29 Mar 2021 Diag: Don Baldrige

ISO



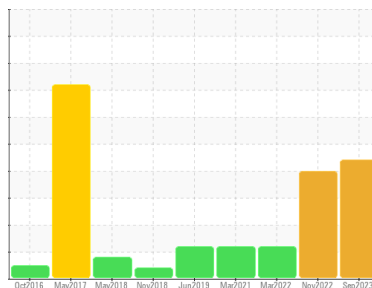
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further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

view report



Machine Id  
**KAESER AS 20T 4648670 (S/N 1085)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-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. There is too much water present in this sample to perform a particle count. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate concentration of water present in the oil. Excessive free water present. Moderate concentration of visible dirt/debris 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>KCPA006156</b>	KCP45794	KCP44840
Sample Date	Client Info			<b>19 Sep 2023</b>	07 Nov 2022	23 Mar 2022
Machine Age	hrs	Client Info		<b>30194</b>	29904	26944
Oil Age	hrs	Client Info		<b>0</b>	2960	3025
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	2	▲ 2	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	19	13	12
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

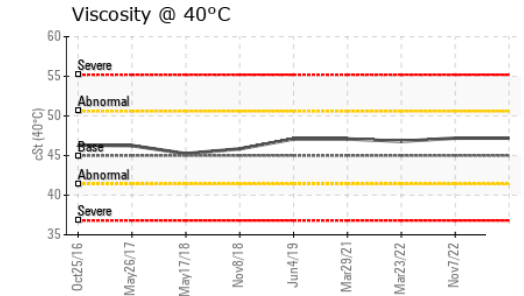
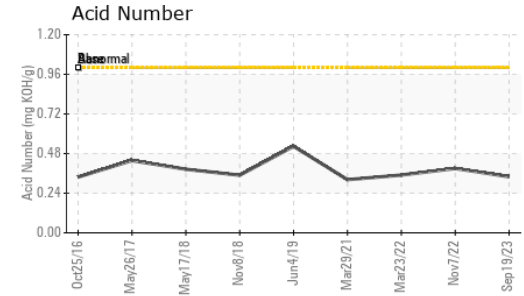
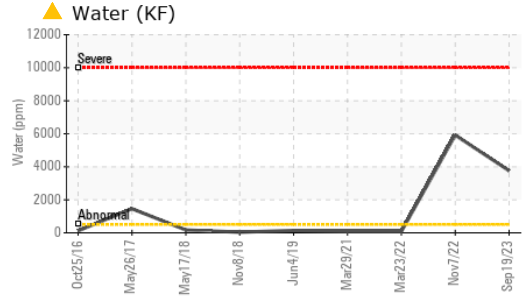
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	100	11	15	19
Calcium	ppm	ASTM D5185m	0	3	<1	0
Phosphorus	ppm	ASTM D5185m	0	4	8	0
Zinc	ppm	ASTM D5185m	0	32	38	65
Sulfur	ppm	ASTM D5185m	23500	23937	23727	15354

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	1	<1
Sodium	ppm	ASTM D5185m		4	2	7
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water	%	ASTM D6304	>0.05	▲ 0.376	▲ 0.592	0.008
ppm Water	ppm	ASTM D6304	>500	▲ 3760	▲ 5920	82.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	---	11120
Particles >6µm		ASTM D7647	>1300	---	---	▲ 4596
Particles >14µm		ASTM D7647	>80	---	---	▲ 562
Particles >21µm		ASTM D7647	>20	---	---	▲ 94
Particles >38µm		ASTM D7647	>4	---	---	4
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	---	▲ 19/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.34	0.39	0.35

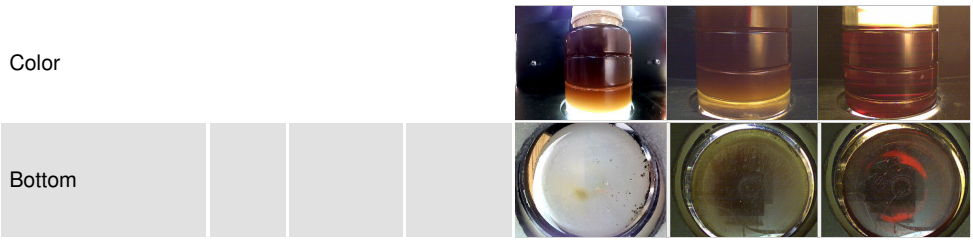
# OIL ANALYSIS REPORT



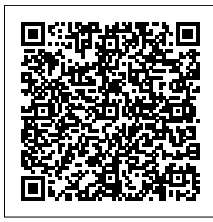
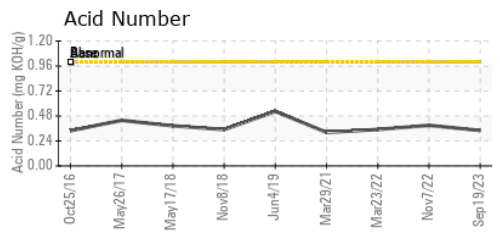
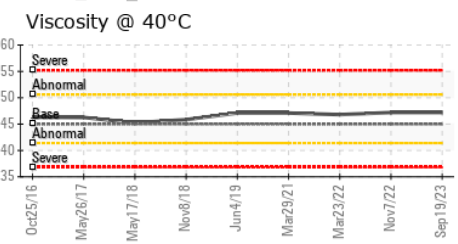
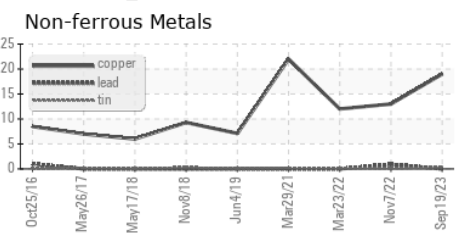
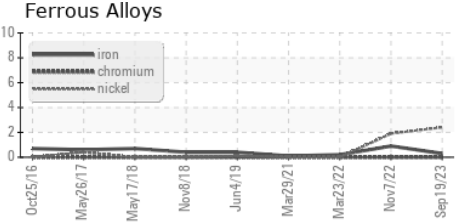
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ >10%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	47.2	46.8

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006156  
**Lab Number** : 05960614  
**Unique Number** : 10661827  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BARE ESSENTIALS - SHISEIDO AMERICAS CORP**  
 5271 CENTER POINT CT  
 GROVEPORT, OH  
 US 43125  
 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: