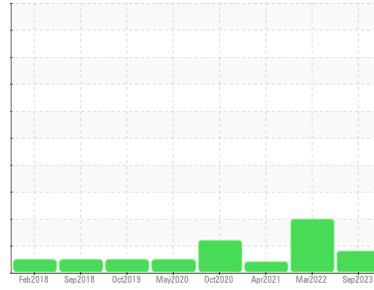




# PROBLEM SUMMARY

Sample Rating Trend



## SEDIMENT



Machine Id  
**KAESER ASV40 4658950 (S/N 1014)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- QTS)**

### COMPONENT CONDITION SUMMARY

No relevant graphs to display

### RECOMMENDATION

The 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.

### PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: CBRCED  
 Sample No.: KCPA000944  
 Lab Number: 05965402  
 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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

**HISTORICAL DIAGNOSIS**

**11 Mar 2022 Diag: Doug Bogart**

**WATER**



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 a light amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**09 Apr 2021 Diag: Jonathan Hester**

**VIS DEBRIS**



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. All 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



**29 Oct 2020 Diag: Jonathan Hester**

**SEDIMENT**



The 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. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

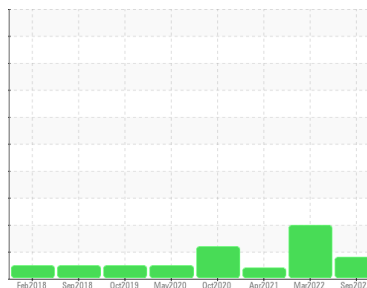
view report



Machine Id  
**KAESER ASV40 4658950 (S/N 1014)**

Component  
**Compressor**

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



**DIAGNOSIS**

**Recommendation**

The 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.

**Wear**

All component wear rates are normal.

**Contamination**

There is a moderate amount of visible silt present in the sample.

**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>KCPA000944</b>	KCP38179	KCP37220
Sample Date	Client Info			<b>21 Sep 2023</b>	11 Mar 2022	09 Apr 2021
Machine Age	hrs	Client Info		<b>28964</b>	18027	11833
Oil Age	hrs	Client Info		<b>0</b>	6194	4222
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	2	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	<1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	5	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	3	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

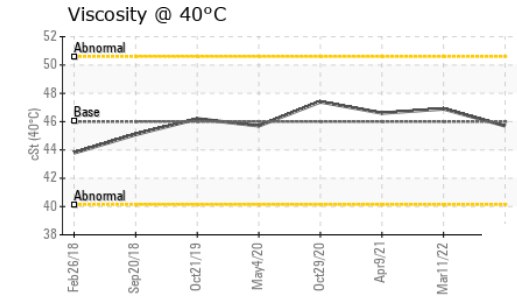
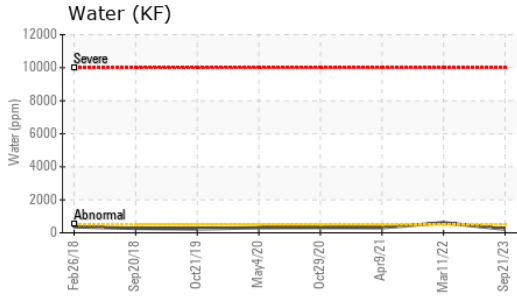
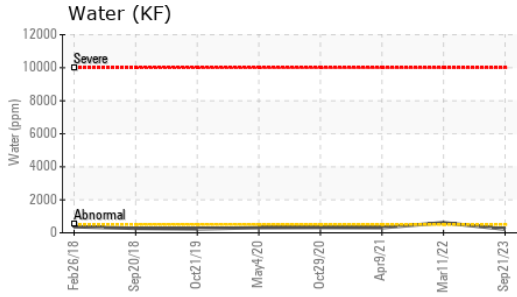
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	<1
Barium	ppm	ASTM D5185m	90	85	121	102
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	90	90	121	104
Calcium	ppm	ASTM D5185m	2	0	7	3
Phosphorus	ppm	ASTM D5185m		0	12	2
Zinc	ppm	ASTM D5185m		0	<1	0
Sulfur	ppm	ASTM D5185m		16139	14209	14504

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	<1
Sodium	ppm	ASTM D5185m		7	21	11
Potassium	ppm	ASTM D5185m	>20	0	2	1
Water	%	ASTM D6304	>0.05	0.022	▲ 0.061	0.031
ppm Water	ppm	ASTM D6304	>500	220.5	▲ 612.9	310.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	24916	---
Particles >6µm		ASTM D7647	>1300	---	▲ 2380	---
Particles >14µm		ASTM D7647	>80	---	69	---
Particles >21µm		ASTM D7647	>20	---	14	---
Particles >38µm		ASTM D7647	>4	---	0	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>17/13	---	▲ 18/13	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.38	0.44	0.387

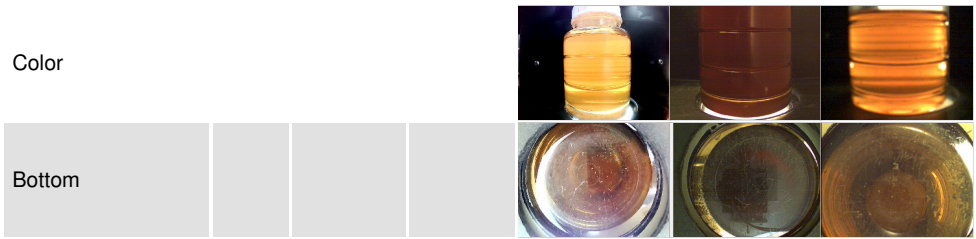
# OIL ANALYSIS REPORT



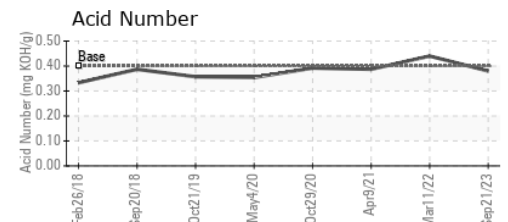
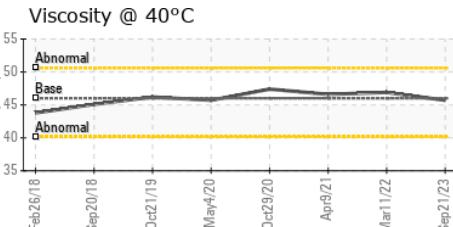
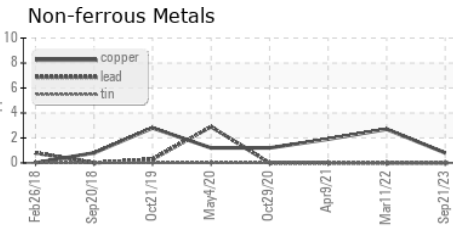
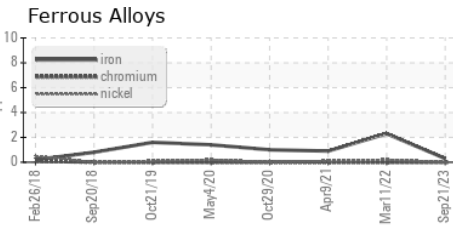
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.7	46.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA000944 **Received** : 29 Sep 2023  
**Lab Number** : 05965402 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10671953 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CBRE GWS LLC**  
 1834 SH 71 W  
 CEDAR CREEK, TX  
 US 78612  
 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: