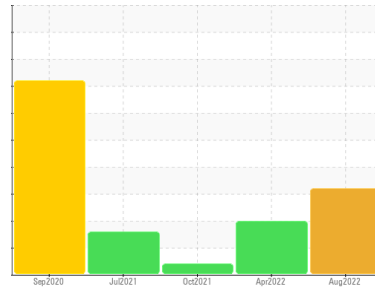


PROBLEM SUMMARY

Sample Rating Trend



WATER



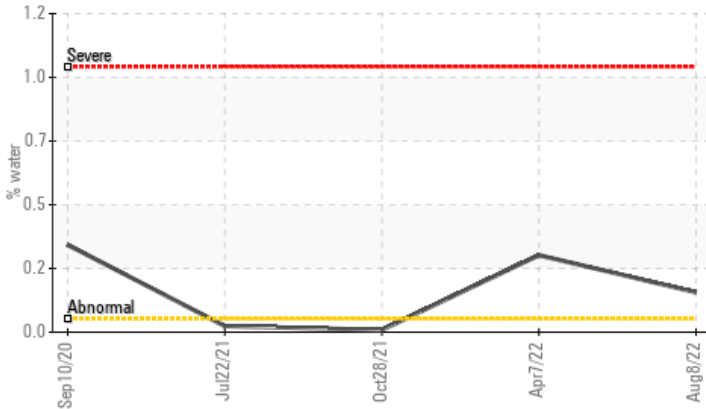
Machine Id
695314 (S/N 1148)

Component
Compressor

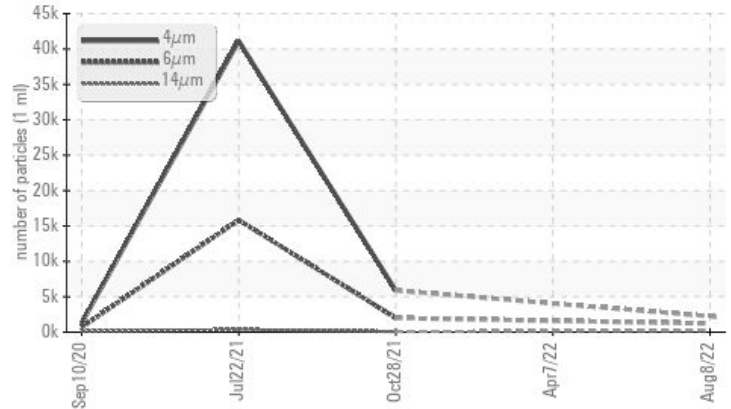
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water



▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Water	%	ASTM D6304	>0.05	▲ 0.150	▲ 0.290	0.008
ppm Water	ppm	ASTM D6304	>500	▲ 1500	▲ 2900	82.4
Particles >14µm		ASTM D7647	>80	▲ 207	---	76
Particles >21µm		ASTM D7647	>20	▲ 70	---	23
Particles >38µm		ASTM D7647	>4	▲ 11	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 18/17/15	---	▲ 18/13

Customer Id: CITBLA
Sample No.: KC05623097
Lab Number: 05623097
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

07 Apr 2022 Diag: Doug Bogart

WATER



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. 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 light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



28 Oct 2021 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](#)



22 Jul 2021 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.

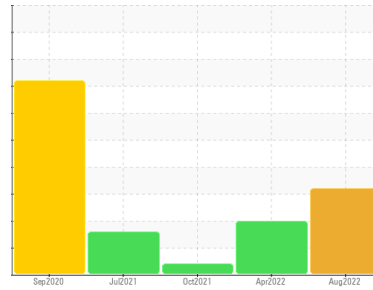
[view report](#)



Machine Id
695314 (S/N 1148)

Component
Compressor

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



DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. 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 suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			KC05623097	KC05518176	KC05391950
Sample Date			08 Aug 2022	07 Apr 2022	28 Oct 2021
Machine Age	hrs		17563	15072	12117
Oil Age	hrs		7140	4912	1957
Oil Changed			Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	0	2	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	0	<1	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	6	21	13
Tin	ppm	ASTM D5185m >10	0	<1	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	history 1	history 2
Boron	ppm	ASTM D5185m	0	<1	19
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 90	<1	0	6
Calcium	ppm	ASTM D5185m 2	0	0	1
Phosphorus	ppm	ASTM D5185m	2	12	0
Zinc	ppm	ASTM D5185m	4	15	63

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	0	<1	0
Sodium	ppm	ASTM D5185m	0	<1	3
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	▲ 0.150	▲ 0.290	0.008
ppm Water	ppm	ASTM D6304 >500	▲ 1500	▲ 2900	82.4

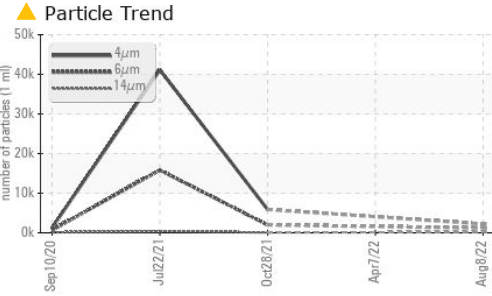
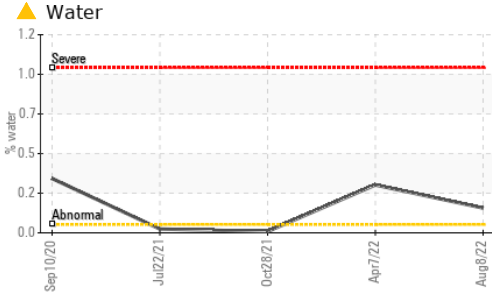
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		2236	---	5885
Particles >6µm	ASTM D7647	>1300	1218	---	▲ 1980
Particles >14µm	ASTM D7647	>80	▲ 207	---	76
Particles >21µm	ASTM D7647	>20	▲ 70	---	23
Particles >38µm	ASTM D7647	>4	▲ 11	---	0
Particles >71µm	ASTM D7647	>3	1	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 18/17/15	---	▲ 18/13

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.23	0.34	0.281

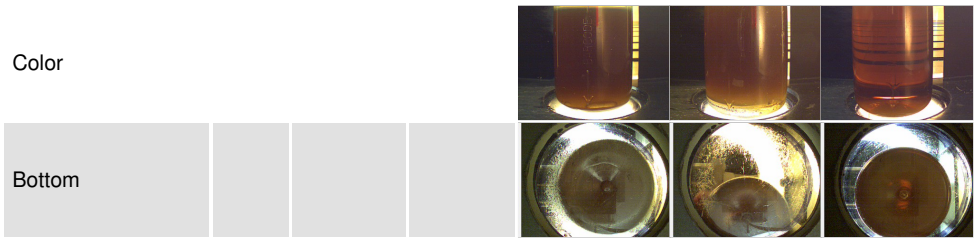
OIL ANALYSIS REPORT



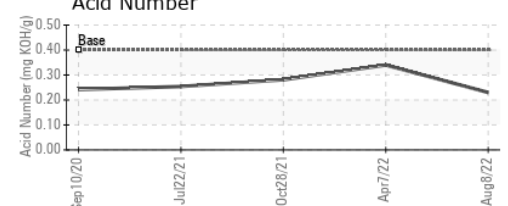
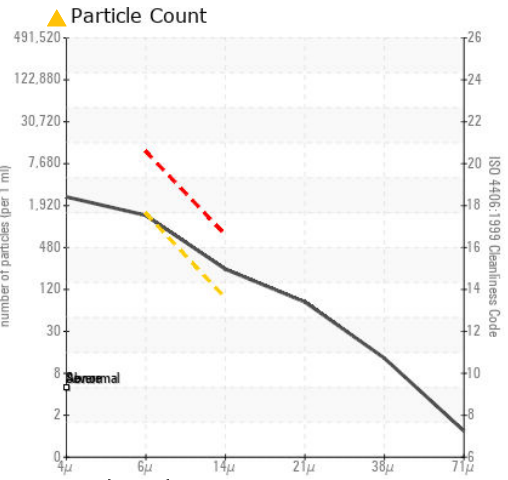
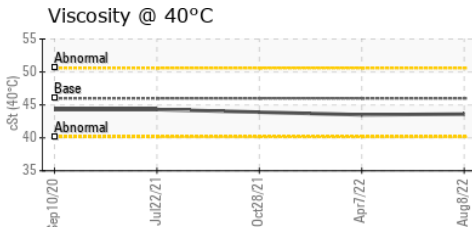
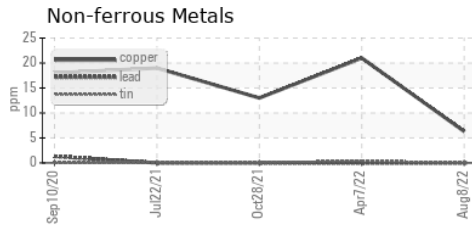
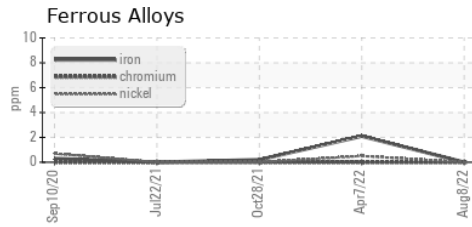
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	43.6	43.5

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05623097
Lab Number : 05623097
Unique Number : 10102604
Test Package : IND 2

CITY OF ASHVILLE WATER TREATMENT
 3374 N FORK LEFT RD
 BLACK MOUNTAIN, NC
 USA 28711
 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: