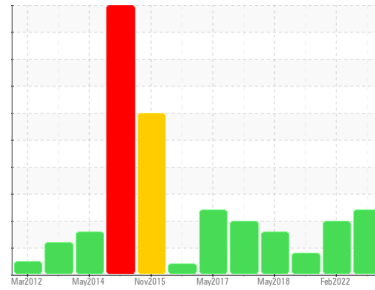


PROBLEM SUMMARY

Sample Rating Trend



WATER



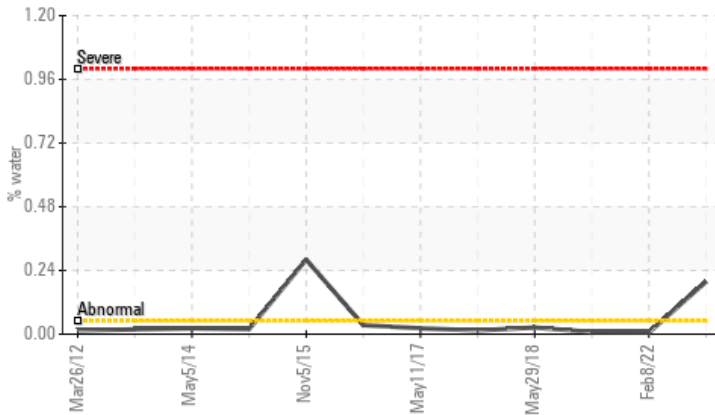
Machine Id
KAESER SK20T 4146059 (S/N 1024)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count on 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				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ 0.198	0.006	0.008
ppm Water	ppm	ASTM D6304	>500	▲ 1976	68.3	80
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	NORML

Customer Id: THENAZ
Sample No.: KC104865
Lab Number: 05636524
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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

08 Feb 2022 Diag: Jonathan Hester

WEAR



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. All other 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](#)



23 Jan 2019 Diag: Angela Borella

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 May 2018 Diag: Jonathan Hester

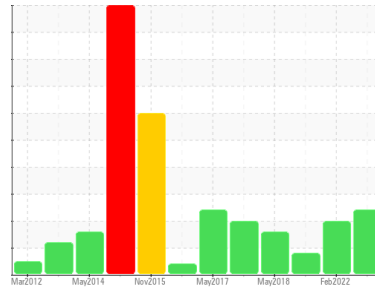
ISO



No corrective action is recommended at this time. 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 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](#)





WATER



Machine Id
KAESER SK20T 4146059 (S/N 1024)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count on 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

Appearance is hazy. There is a moderate concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number		KC104865	KC95102	KC68163
Sample Date		11 Aug 2022	08 Feb 2022	23 Jan 2019
Machine Age	hrs	32361	32359	17513
Oil Age	hrs	1	4372	6867
Oil Changed		Not Changed	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >50	1	7	<1
Chromium	ppm ASTM D5185m >10	0	0	0
Nickel	ppm ASTM D5185m >3	0	0	<1
Titanium	ppm ASTM D5185m >3	0	0	0
Silver	ppm ASTM D5185m >2	0	<1	0
Aluminum	ppm ASTM D5185m >10	2	▲ 11	0
Lead	ppm ASTM D5185m >10	0	0	<1
Copper	ppm ASTM D5185m >50	2	10	14
Tin	ppm ASTM D5185m >10	0	0	0
Antimony	ppm ASTM D5185m	---	---	3
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m	0	0	0
Barium	ppm ASTM D5185m 90	41	0	0
Molybdenum	ppm ASTM D5185m	0	0	<1
Manganese	ppm ASTM D5185m	0	<1	0
Magnesium	ppm ASTM D5185m 90	54	3	30
Calcium	ppm ASTM D5185m 2	0	0	0
Phosphorus	ppm ASTM D5185m	25	134	<1
Zinc	ppm ASTM D5185m	22	96	2

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	0	0	0
Sodium	ppm ASTM D5185m	4	3	9
Potassium	ppm ASTM D5185m >20	0	0	5
Water	% ASTM D6304 >0.05	▲ 0.198	0.006	0.008
ppm Water	ppm ASTM D6304 >500	▲ 1976	68.3	80

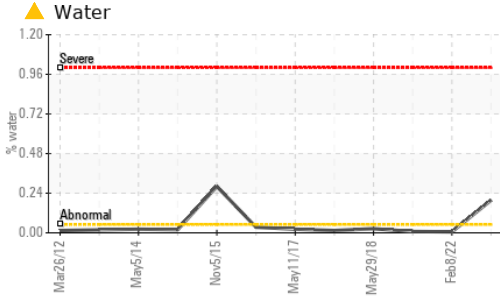
FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	---	27001	8382
Particles >6µm	ASTM D7647 >1300	---	▲ 6052	▲ 3073
Particles >14µm	ASTM D7647 >80	---	▲ 256	▲ 131
Particles >21µm	ASTM D7647 >20	---	▲ 30	25
Particles >38µm	ASTM D7647 >4	---	0	1
Particles >71µm	ASTM D7647 >3	---	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	---	▲ 20/15	▲ 19/14

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 0.4	0.36	0.35	0.408

OIL ANALYSIS REPORT



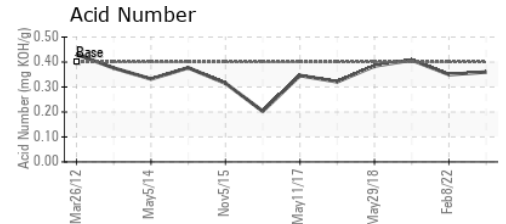
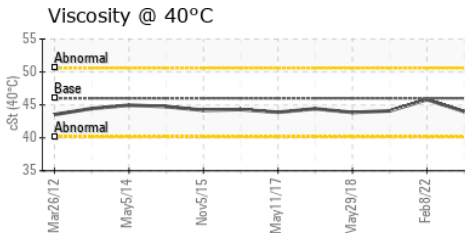
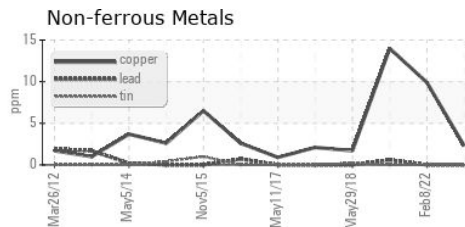
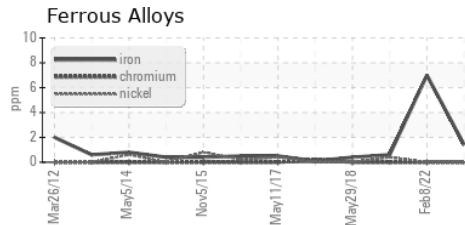
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	44.0	45.8

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



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC104865 **Received** : 08 Sep 2022
Lab Number : 05636524 **Diagnosed** : 15 Sep 2022
Unique Number : 10126054 **Diagnostician** : Doug Bogart
Test Package : IND 2

THERMO FISHER SCIENTIFIC
 6771 SILVERCREST RD
 NAZARETH, PA
 USA 18064
 Contact:

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: