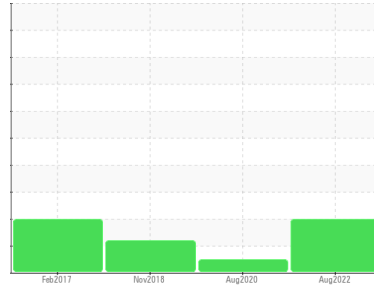


PROBLEM SUMMARY

Sample Rating Trend



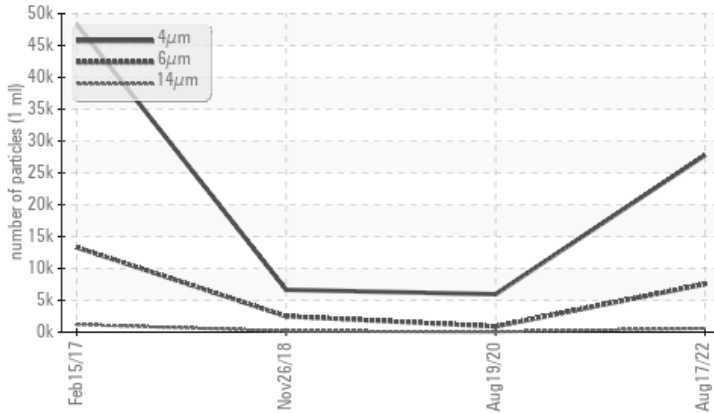
ISO



Machine Id
KAESER SK 15T 4430616 (S/N 1146)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	ISO	ABNORMAL	NORMAL	ABNORMAL
Particles >6µm	>1300	▲ 7554	895	▲ 2478	
Particles >14µm	>80	▲ 582	48	▲ 167	
Particles >21µm	>20	▲ 97	13	▲ 35	
Particles >38µm	>4	▲ 5	0	1	
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 22/20/16	17/13	▲ 18/15	

Customer Id: CARWHIKC
Sample No.: KCP28694
Lab Number: 05633657
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

19 Aug 2020 Diag: Angela Borella

NORMAL



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. 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



26 Nov 2018 Diag: Jonathan Hester

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 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



15 Feb 2017 Diag: Doug Bogart

ISO



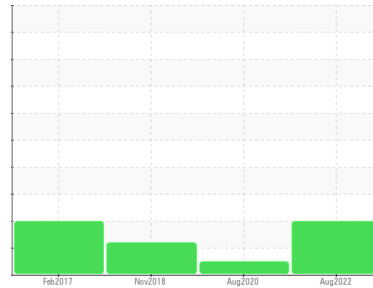
We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER SK 15T 4430616 (S/N 1146)

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



DIAGNOSIS

▲ Recommendation

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.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates 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		KCP28694	KCP10510	KCP12783
Sample Date		17 Aug 2022	19 Aug 2020	26 Nov 2018
Machine Age	hrs	52712	42706	29499
Oil Age	hrs	4000	0	0
Oil Changed		Changed	Changed	Changed
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >50	1	<1	0
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	<1	0	0
Aluminum	ppm ASTM D5185m >10	<1	0	0
Lead	ppm ASTM D5185m >10	<1	0	0
Copper	ppm ASTM D5185m >50	20	14	10
Tin	ppm ASTM D5185m >10	<1	0	0
Antimony	ppm ASTM D5185m	---	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	0	0	0
Barium	ppm ASTM D5185m 90	2	0	0
Molybdenum	ppm ASTM D5185m 0	0	0	0
Manganese	ppm ASTM D5185m	0	0	0
Magnesium	ppm ASTM D5185m 100	12	2	10
Calcium	ppm ASTM D5185m 0	0	0	3
Phosphorus	ppm ASTM D5185m 0	8	<1	0
Zinc	ppm ASTM D5185m 0	65	17	38
Sulfur	ppm ASTM D5185m 23500	19426	18184	21574

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<1	1	0
Sodium	ppm ASTM D5185m	2	1	9
Potassium	ppm ASTM D5185m >20	2	0	0
Water	% ASTM D6304 >0.05	0.006	0.011	0.009
ppm Water	ppm ASTM D6304 >500	66.4	115.1	90

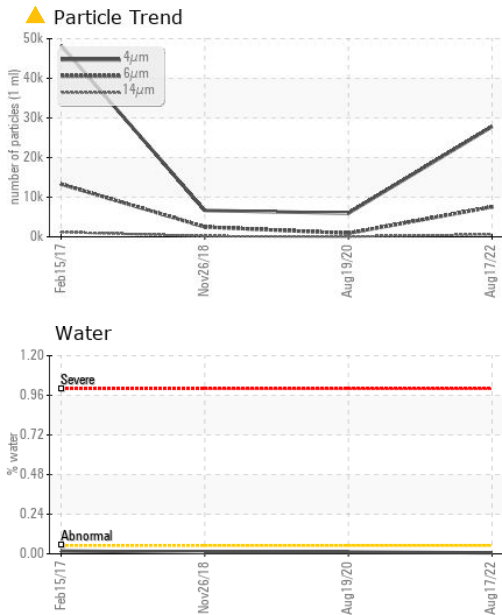
FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	27794	5951	6653
Particles >6µm	ASTM D7647 >1300	▲ 7554	895	▲ 2478
Particles >14µm	ASTM D7647 >80	▲ 582	48	▲ 167
Particles >21µm	ASTM D7647 >20	▲ 97	13	▲ 35
Particles >38µm	ASTM D7647 >4	▲ 5	0	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 22/20/16	17/13	▲ 18/15

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 1.0	0.45	0.460	0.377

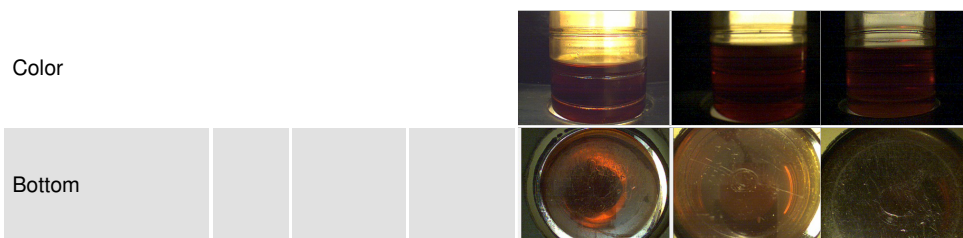
OIL ANALYSIS REPORT



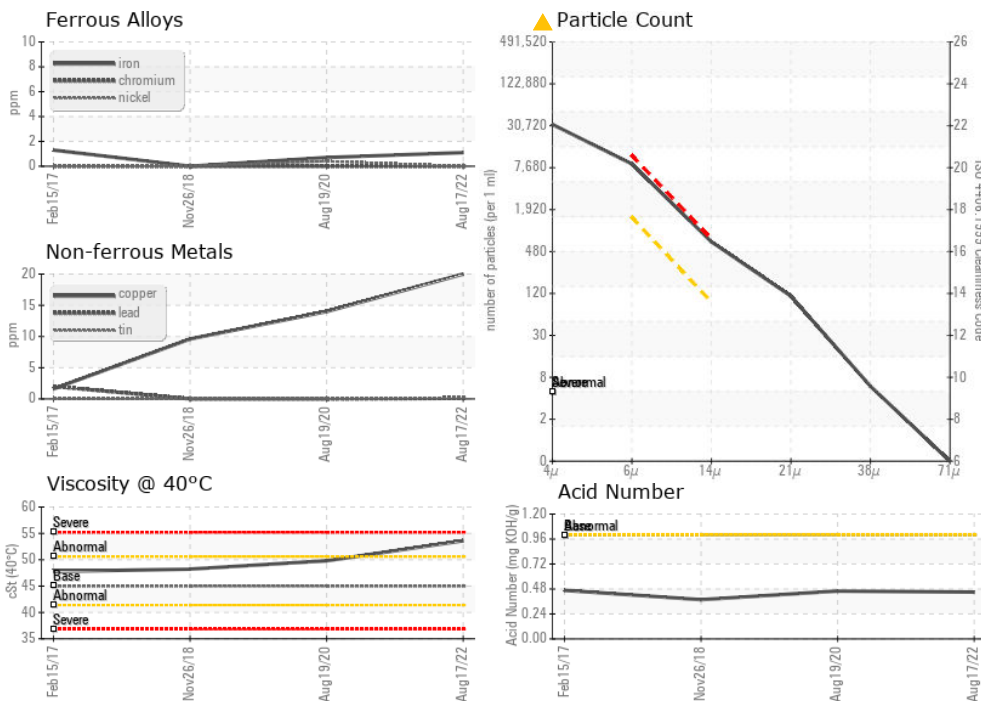
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	53.6	49.8

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. : KCP28694 **Received** : 02 Sep 2022
Lab Number : 05633657 **Diagnosed** : 06 Sep 2022
Unique Number : 10118178 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CARMAX
 10201 PHILADELPHIA RD
 WHITE MARSH, MD
 USA 21162
 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: