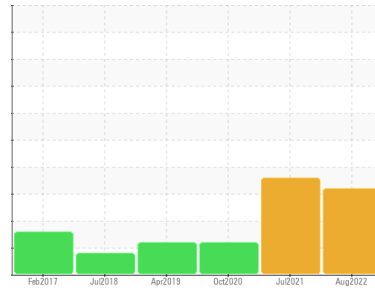


PROBLEM SUMMARY

Sample Rating Trend



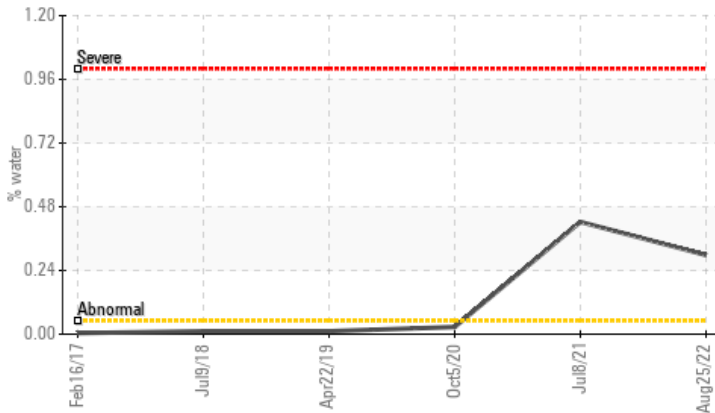
WATER



Machine Id
KAESER SX7.5T 4646848 (S/N 1090)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ 0.298	▲ 0.423	0.027
ppm Water	ppm	ASTM D6304	>500	▲ 2980	▲ 4230	277.1
Free Water	scalar	*Visual		▲ 5.0	▲ 1.0	NEG

Customer Id: CUMAVO
Sample No.: KCP49792
Lab Number: 05637128
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

08 Jul 2021 Diag: Don Baldrige

WATER



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 moderate concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.

[view report](#)



05 Oct 2020 Diag: Doug Bogart

WEAR



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. We were unable to perform a particle count due to a high concentration of particles present in this sample. An increase in the copper level is noted. 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](#)



22 Apr 2019 Diag: Angela Borella

ISO

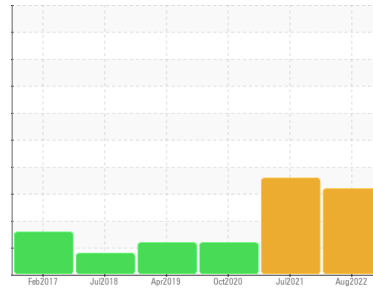


Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



Machine Id
KAESER SX7.5T 4646848 (S/N 1090)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)



DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. 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

Excessive free water present. 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			KCP49792	KCP41917	KCP31624
Sample Date			25 Aug 2022	08 Jul 2021	05 Oct 2020
Machine Age	hrs		19805	17134	15860
Oil Age	hrs		1654	1274	3160
Oil Changed			Changed	Not Changd	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	1	3	2
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	<1	<1	<1
Aluminum	ppm ASTM D5185m	>10	0	1	0
Lead	ppm ASTM D5185m	>10	0	0	<1
Copper	ppm ASTM D5185m	>50	14	15	▲ 41
Tin	ppm ASTM D5185m	>10	0	0	<1
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	2	2
Barium	ppm ASTM D5185m	90	0	2	<1
Molybdenum	ppm ASTM D5185m	0	0	0	0
Manganese	ppm ASTM D5185m		0	<1	<1
Magnesium	ppm ASTM D5185m	100	0	16	24
Calcium	ppm ASTM D5185m	0	0	1	<1
Phosphorus	ppm ASTM D5185m	0	2	12	3
Zinc	ppm ASTM D5185m	0	69	86	61
Sulfur	ppm ASTM D5185m	23500	17613	18695	19896

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<1	<1	4
Sodium	ppm ASTM D5185m		<1	6	5
Potassium	ppm ASTM D5185m	>20	0	2	3
Water	% ASTM D6304	>0.05	▲ 0.298	▲ 0.423	0.027
ppm Water	ppm ASTM D6304	>500	▲ 2980	▲ 4230	277.1

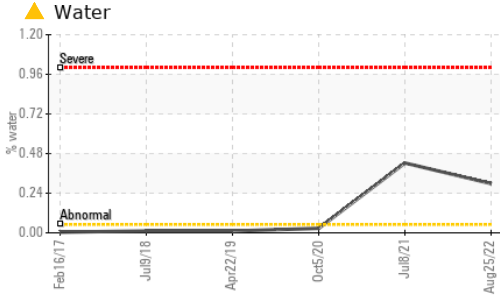
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		---	---	---
Particles >6µm	ASTM D7647	>1300	---	---	---
Particles >14µm	ASTM D7647	>80	---	---	---
Particles >21µm	ASTM D7647	>20	---	---	---
Particles >38µm	ASTM D7647	>4	---	---	---
Particles >71µm	ASTM D7647	>3	---	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.0	0.24	0.317	0.234

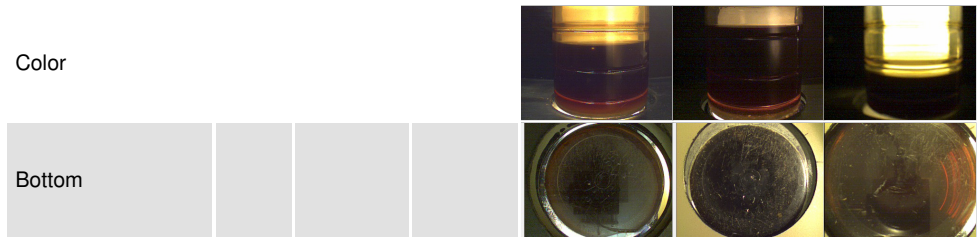
OIL ANALYSIS REPORT



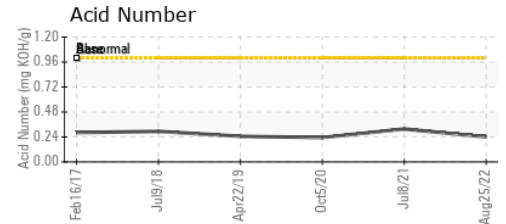
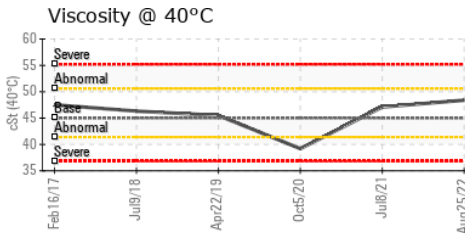
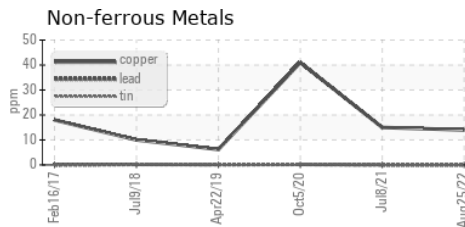
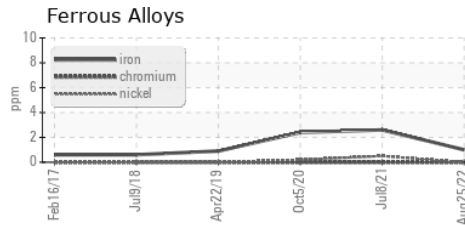
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		▲ 5.0	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	48.4	47.1

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. : KCP49792 **Received** : 08 Sep 2022
Lab Number : 05637128 **Diagnosed** : 09 Sep 2022
Unique Number : 10126658 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CUMMINGS MICROWAVE - PPG AEROSPACE
 244 BODWELL ST
 AVON, MA
 USA 02322
 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: