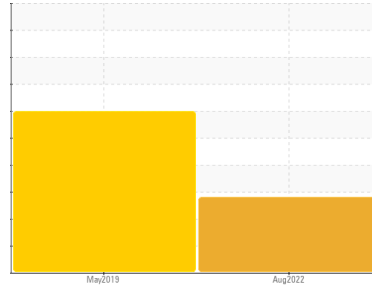


PROBLEM SUMMARY

Sample Rating Trend

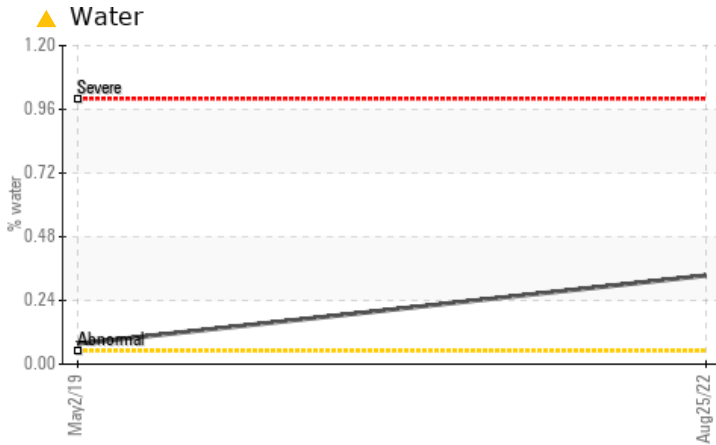


WATER



Machine Id
KAESER A/C SM 12 SPECIAL 4489920 (S/N 1233)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in 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	---
Water	%	ASTM D6304	>0.05	▲ 0.334	▲ 0.077	---
ppm Water	ppm	ASTM D6304	>500	▲ 3340	▲ 770	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML	---
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG	---

Customer Id: BOUFIT
Sample No.: KCP33353
Lab Number: 05629625
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

02 May 2019 Diag: Doug Bogart

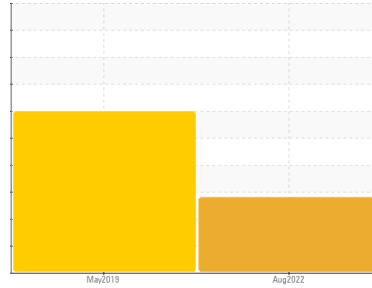
WATER



We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample in 500 hours to monitor this condition. The iron level is abnormal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is above the recommended limit. The oil is no longer serviceable.

view report





Machine Id
KAESER A/C SM 12 SPECIAL 4489920 (S/N 1233)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in 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

Moderate concentration of visible dirt/debris 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.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number				KCP33353	KCP19258	---
Sample Date				25 Aug 2022	02 May 2019	---
Machine Age	hrs			15967	12494	---
Oil Age	hrs			0	365	---
Oil Changed				Not Changed	Not Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	2	▲ 72	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>3	0	2	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>10	<1	0	---
Lead	ppm	ASTM D5185m	>10	0	<1	---
Copper	ppm	ASTM D5185m	>50	10	41	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Antimony	ppm	ASTM D5185m		---	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

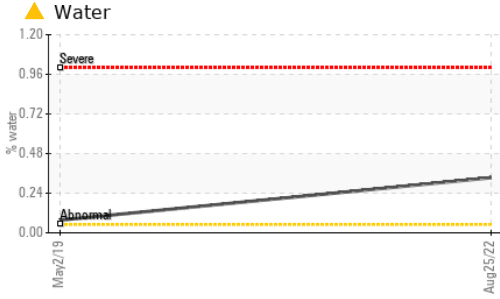
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	2	---
Barium	ppm	ASTM D5185m	90	15	3	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	100	22	2	---
Calcium	ppm	ASTM D5185m	0	<1	2	---
Phosphorus	ppm	ASTM D5185m	0	4	10	---
Zinc	ppm	ASTM D5185m	0	24	13	---
Sulfur	ppm	ASTM D5185m	23500	16810	21029	---

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	<1	0	---
Sodium	ppm	ASTM D5185m		2	6	---
Potassium	ppm	ASTM D5185m	>20	0	1	---
Water	%	ASTM D6304	>0.05	▲ 0.334	▲ 0.077	---
ppm Water	ppm	ASTM D6304	>500	▲ 3340	▲ 770	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		---	2435	---
Particles >6µm		ASTM D7647	>1300	---	▲ 1326	---
Particles >14µm		ASTM D7647	>80	---	▲ 226	---
Particles >21µm		ASTM D7647	>20	---	▲ 76	---
Particles >38µm		ASTM D7647	>4	---	▲ 11	---
Particles >71µm		ASTM D7647	>3	---	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 18/15	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	▲ 1.788	---

OIL ANALYSIS REPORT



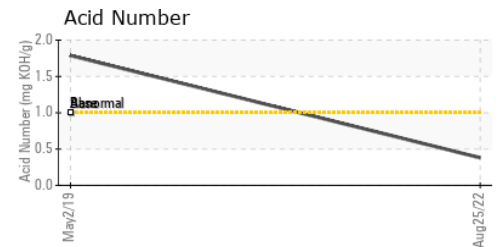
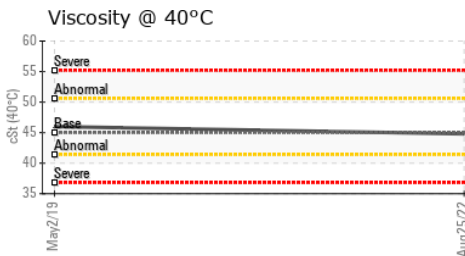
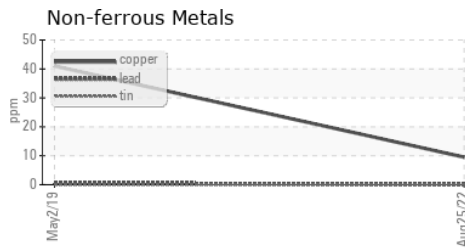
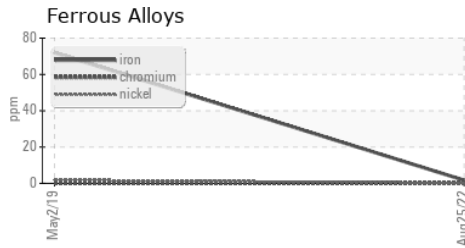
VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	▲ MODER	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2	
Visc @ 40°C	cSt	ASTM D445	45	44.8	46.0	---

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. : KCP33353 **Received** : 29 Aug 2022
Lab Number : 05629625 **Diagnosed** : 31 Aug 2022
Unique Number : 10114146 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BOUTWELL OWENS AND CO INC
 251 AUTHORITY DR
 FITCHBURG, MA
 USA 01420
 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: