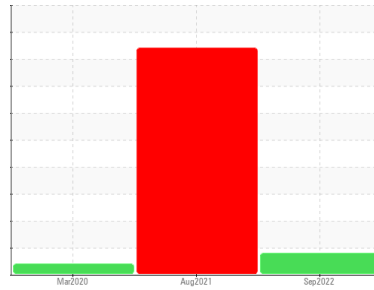


PROBLEM SUMMARY

Sample Rating Trend



ISO



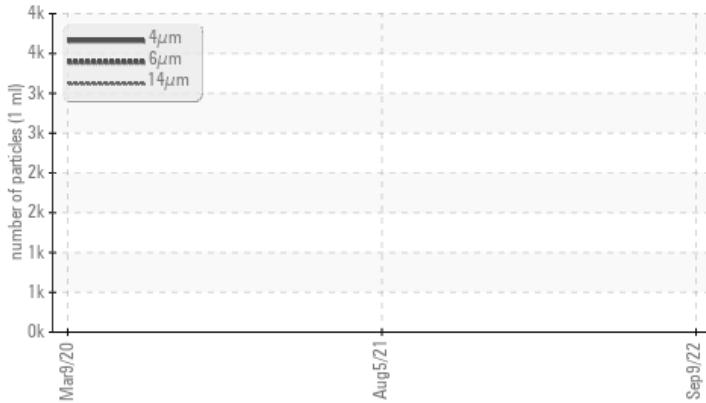
Machine Id
KAESER 6173674

Component
Compressor

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

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			ATTENTION	SEVERE	ABNORMAL
Particles >14µm	ASTM D7647	>80	▲ 84	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/17/14	---	---

Customer Id: COLCOLUMOH

Sample No.: KCP46313

Lab Number: 05648954

Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Jonathan Hester +1 919-379-4092 x4092

jhester@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

05 Aug 2021 Diag: Jonathan Hester

WATER



Oil and filter change at the time of sampling has been noted. 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. Appearance is hazy. Free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



09 Mar 2020 Diag: Doug Bogart

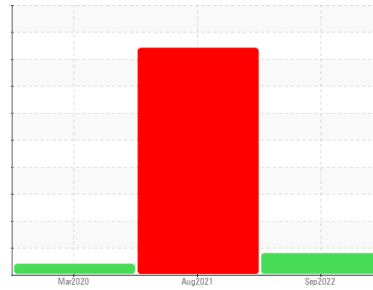
VIS DEBRIS



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. All component wear rates are normal. 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](#)





Machine Id
KAESER 6173674

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

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 moderate 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		KCP46313	KCP42940	KCP25447
Sample Date		09 Sep 2022	05 Aug 2021	09 Mar 2020
Machine Age	hrs	11326	8667	4614
Oil Age	hrs	2659	4053	4614
Oil Changed		Changed	Changed	Changed
Sample Status		ATTENTION	SEVERE	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	0	0
Titanium	ppm ASTM D5185m >3	0	0	0
Silver	ppm ASTM D5185m >2	0	<1	0
Aluminum	ppm ASTM D5185m >10	0	0	3
Lead	ppm ASTM D5185m >10	0	<1	<1
Copper	ppm ASTM D5185m >50	11	16	17
Tin	ppm ASTM D5185m >10	0	<1	<1
Antimony	ppm ASTM D5185m	---	0	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	0	0	0
Barium	ppm ASTM D5185m 90	0	0	0
Molybdenum	ppm ASTM D5185m 0	0	0	0
Manganese	ppm ASTM D5185m	0	<1	<1
Magnesium	ppm ASTM D5185m 100	46	16	41
Calcium	ppm ASTM D5185m 0	0	0	4
Phosphorus	ppm ASTM D5185m 0	12	7	1
Zinc	ppm ASTM D5185m 0	48	29	39
Sulfur	ppm ASTM D5185m 23500	22989	20663	14054

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	2	4	22
Sodium	ppm ASTM D5185m	21	1	23
Potassium	ppm ASTM D5185m >20	2	<1	4
Water	% ASTM D6304 >0.05	0.027	▲ 0.225	0.012
ppm Water	ppm ASTM D6304 >500	275.4	▲ 2250	123.9

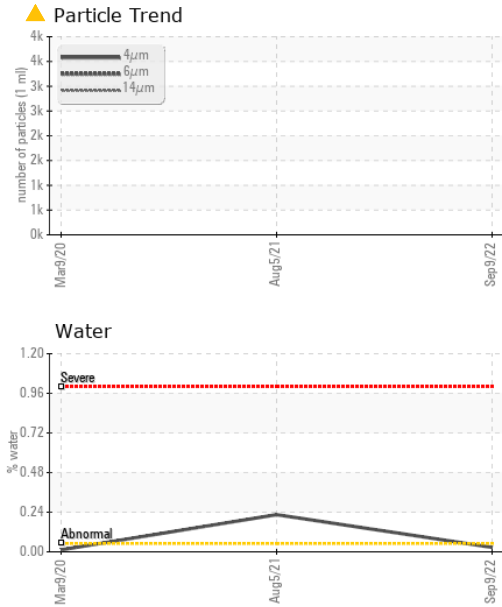
FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	3915	---	---
Particles >6µm	ASTM D7647 >1300	1184	---	---
Particles >14µm	ASTM D7647 >80	▲ 84	---	---
Particles >21µm	ASTM D7647 >20	12	---	---
Particles >38µm	ASTM D7647 >4	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/17/14	---	---

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 1.0	0.40	0.369	0.283

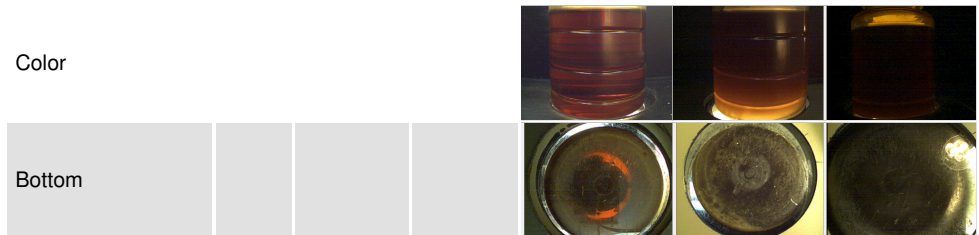
OIL ANALYSIS REPORT



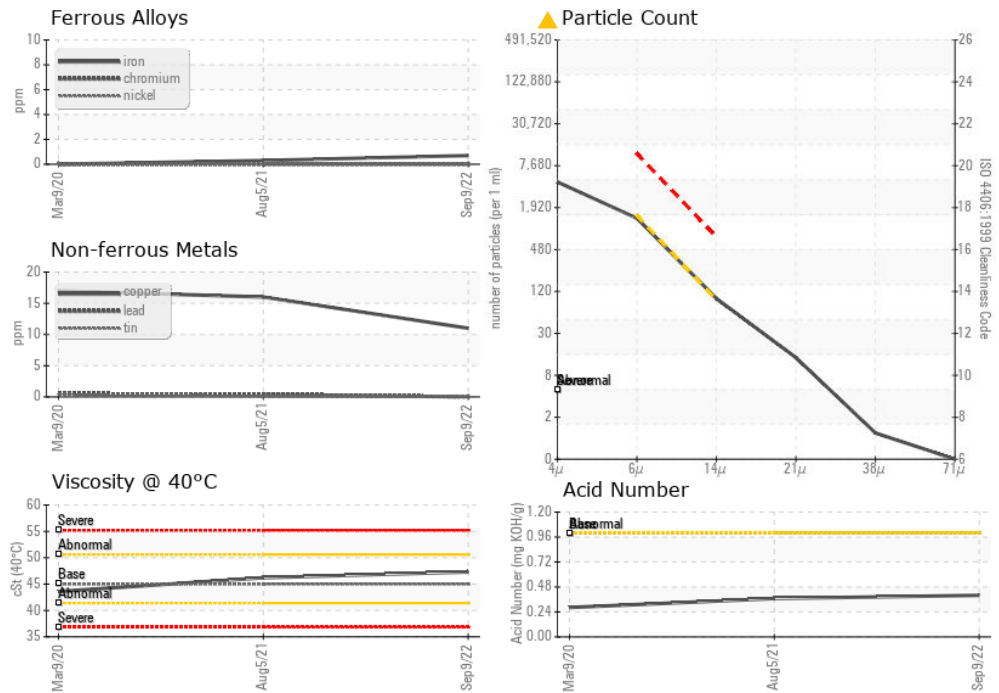
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
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 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	47.3	46.2

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. : KCP46313 **Received** : 22 Sep 2022
Lab Number : 05648954 **Diagnosed** : 26 Sep 2022
Unique Number : 10143493 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

COLUMBUS GRANITE
 2276 W BROOKE DR
 COLUMBUS, OH
 USA 43228
 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: