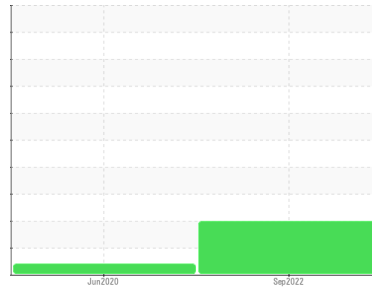


PROBLEM SUMMARY

Sample Rating Trend



ISO



Machine Id
KAESER 3736966 (S/N 1568)
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			ABNORMAL	ABNORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ 11138	---	---
Particles >14µm	ASTM D7647	>80	▲ 743	---	---
Particles >21µm	ASTM D7647	>20	▲ 188	---	---
Particles >38µm	ASTM D7647	>4	▲ 6	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/21/17	---	---

Customer Id: TLRMID
Sample No.: KCP49840
Lab Number: 05639672
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

10 Jun 2020 Diag: Doug Bogart

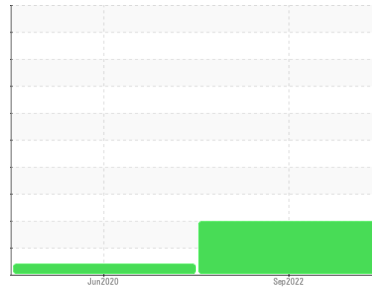
VIS DEBRIS



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 3736966 (S/N 1568)

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 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		KCP49840	KCP10036	---
Sample Date		01 Sep 2022	10 Jun 2020	---
Machine Age	hrs	22323	15775	---
Oil Age	hrs	3000	3000	---
Oil Changed		Changed	Changed	---
Sample Status		ABNORMAL	ABNORMAL	---

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >50	<1	2	---
Chromium	ppm ASTM D5185m >10	0	0	---
Nickel	ppm ASTM D5185m >3	0	0	---
Titanium	ppm ASTM D5185m >3	0	0	---
Silver	ppm ASTM D5185m >2	<1	0	---
Aluminum	ppm ASTM D5185m >10	<1	0	---
Lead	ppm ASTM D5185m >10	0	0	---
Copper	ppm ASTM D5185m >50	31	21	---
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	0	---
Barium	ppm ASTM D5185m 90	0	2	---
Molybdenum	ppm ASTM D5185m 0	0	0	---
Manganese	ppm ASTM D5185m	0	<1	---
Magnesium	ppm ASTM D5185m 100	1	9	---
Calcium	ppm ASTM D5185m 0	0	0	---
Phosphorus	ppm ASTM D5185m 0	9	44	---
Zinc	ppm ASTM D5185m 0	52	78	---
Sulfur	ppm ASTM D5185m 23500	17599	12214	---

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	2	<1	---
Sodium	ppm ASTM D5185m	0	2	---
Potassium	ppm ASTM D5185m >20	0	0	---
Water	% ASTM D6304 >0.05	0.006	0.008	---
ppm Water	ppm ASTM D6304 >500	67.9	87.3	---

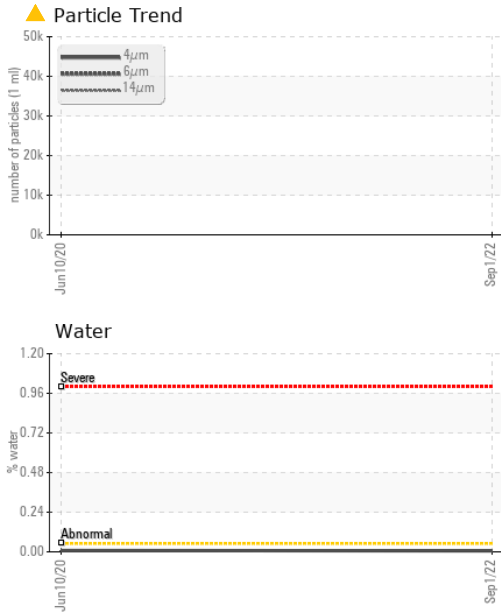
FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	40215	---	---
Particles >6µm	ASTM D7647 >1300	▲ 11138	---	---
Particles >14µm	ASTM D7647 >80	▲ 743	---	---
Particles >21µm	ASTM D7647 >20	▲ 188	---	---
Particles >38µm	ASTM D7647 >4	▲ 6	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 23/21/17	---	---

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 1.0	0.38	0.324	---

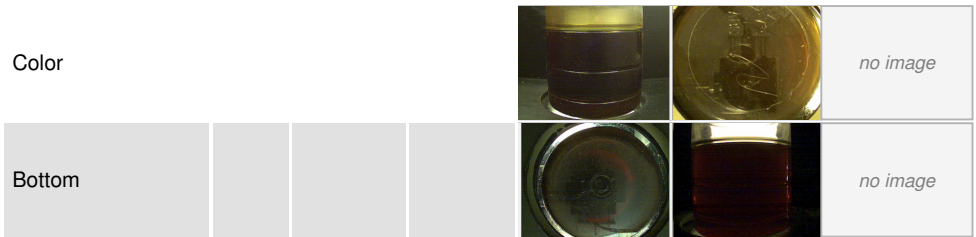
OIL ANALYSIS REPORT



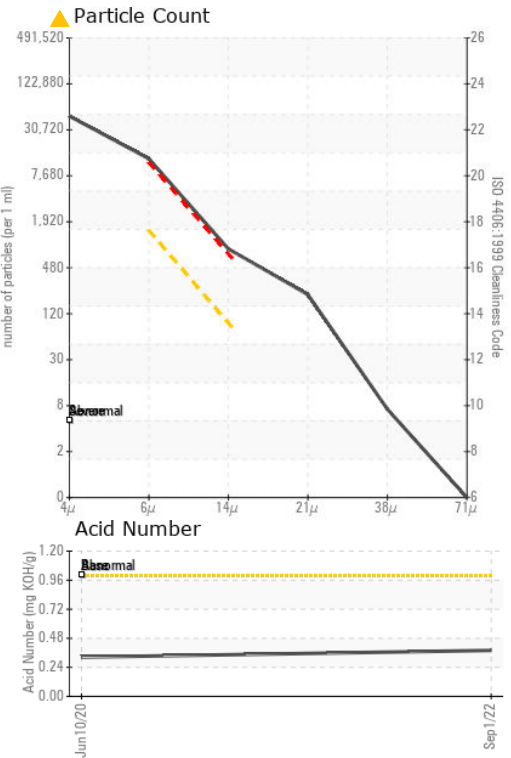
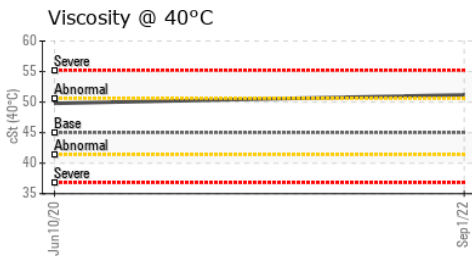
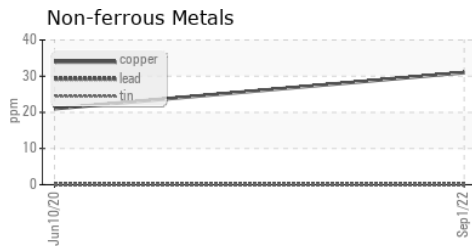
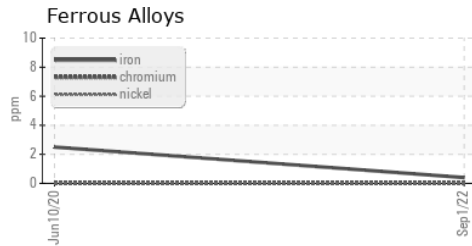
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	51.2	49.8

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. : KCP49840 **Received** : 13 Sep 2022
Lab Number : 05639672 **Diagnosed** : 14 Sep 2022
Unique Number : 10129202 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

TLR HYDRAULICS
 1031 EASTGATE RD
 MIDLOTHIAN, TX
 USA 76065
 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: