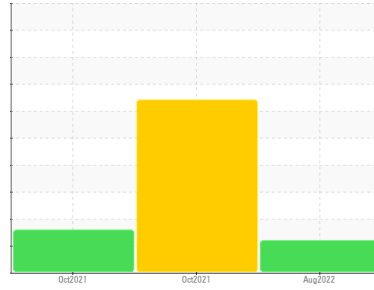


PROBLEM SUMMARY

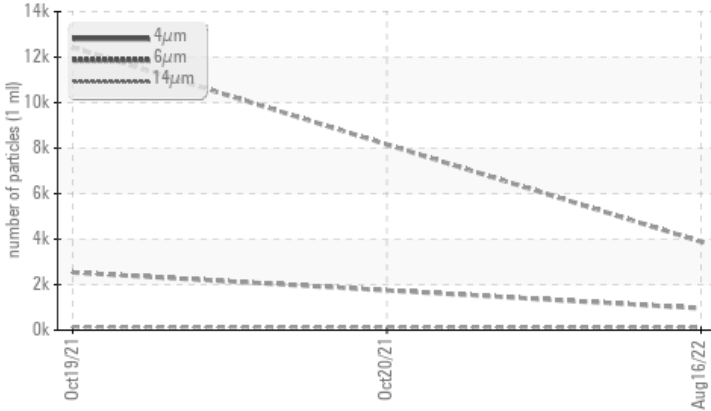
Area
[73132516]
 Machine Id
KAESER 1422721
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- QTS)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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	▲ 124	---	▲ 140
Particles >21µm	ASTM D7647	>20	▲ 36	---	▲ 37
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/17/14	---	▲ 19/14

Customer Id: TRAMILCA
 Sample No.: KCP44047
 Lab Number: 05635060
 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
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

20 Oct 2021 Diag: Jonathan Hester

WEAR



Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. The iron level is severe. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

[view report](#)



19 Oct 2021 Diag: Jonathan Hester

VISCOSITY



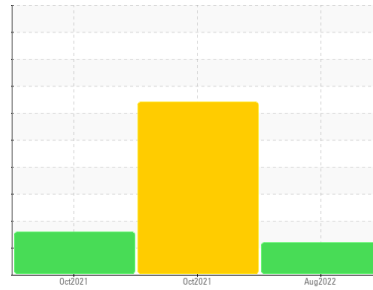
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

[view report](#)



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
[73132516]
Machine Id
KAESER 1422721

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

DIAGNOSIS

▲ Recommendation

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				KCP44047	KCP38944	KCP37813
Sample Date				16 Aug 2022	20 Oct 2021	19 Oct 2021
Machine Age	hrs			25730	19927	19927
Oil Age	hrs			3000	4000	3200
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	0	148	0
Chromium	ppm	ASTM D5185m	>10	0	<1	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	4	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	2	9	8
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

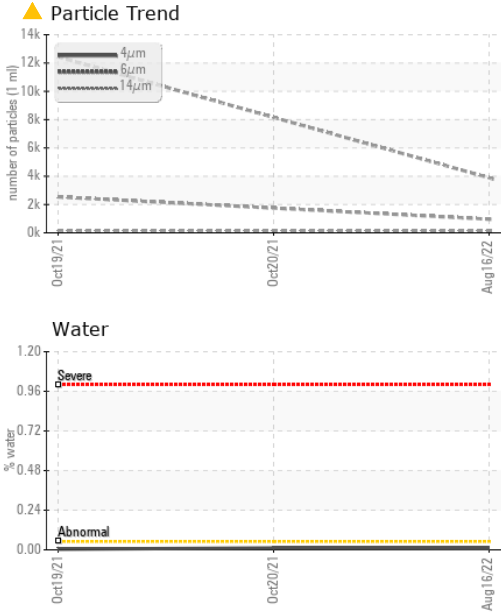
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	<1	0	<1
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	100	0	<1	0
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	0	0	5	0
Zinc	ppm	ASTM D5185m	0	0	148	0
Sulfur	ppm	ASTM D5185m	23500	16917	17960	12787

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	<1	2	6
Sodium	ppm	ASTM D5185m		2	0	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water	%	ASTM D6304	>0.05	0.008	0.011	0.004
ppm Water	ppm	ASTM D6304	>500	82.7	117.2	48.7

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		3888	---	12432
Particles >6µm		ASTM D7647	>1300	959	---	▲ 2536
Particles >14µm		ASTM D7647	>80	▲ 124	---	▲ 140
Particles >21µm		ASTM D7647	>20	▲ 36	---	▲ 37
Particles >38µm		ASTM D7647	>4	3	---	3
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 19/17/14	---	▲ 19/14

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.48	0.501	0.562

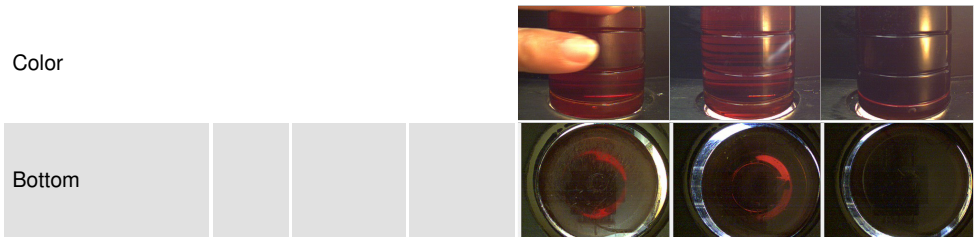
OIL ANALYSIS REPORT



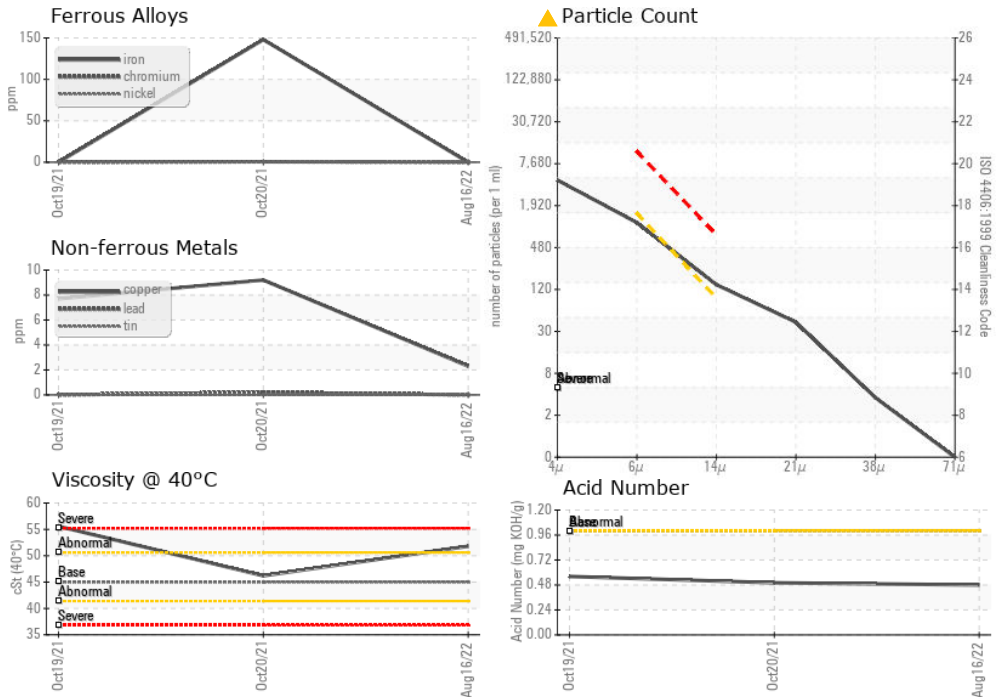
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	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	51.8	46.2 ▲ 55.59

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. : KCP44047 **Received** : 06 Sep 2022
Lab Number : 05635060 **Diagnosed** : 08 Sep 2022
Unique Number : 10124590 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

TRANPAK
 212 RAILROAD AVE
 MILPITAS, CA
 USA 95035
 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: