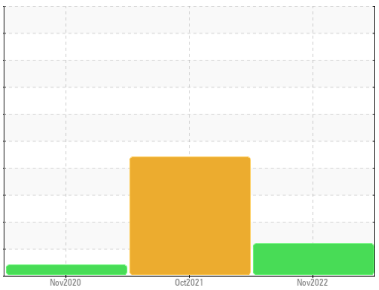
PROBLEM SUMMARY

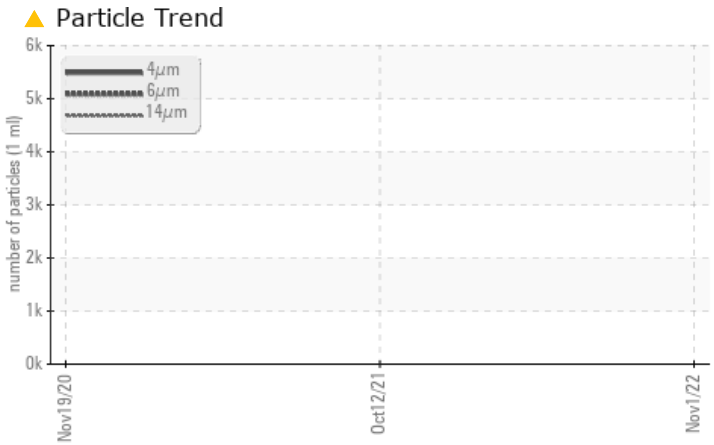
Sample Rating Trend



ISO

Machine Id
5864326 (S/N 5325)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY



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	ABNORMAL	ABNORMAL
Particles >14µm		ASTM D7647	>80	▲ **84**	---	---
Particles >21µm		ASTM D7647	>20	▲ **32**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/17/14**	---	---

Customer Id: UNIYAD
Sample No.: KCP47131D
Lab Number: 05688452
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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

12 Oct 2021 Diag: Angela Borella

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.An increase in the iron level is noted. All other component wear rates are normal. There is a light concentration of water present in the oil. Free water present. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

19 Nov 2020 Diag: Jonathan Hester

VIS DEBRIS

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

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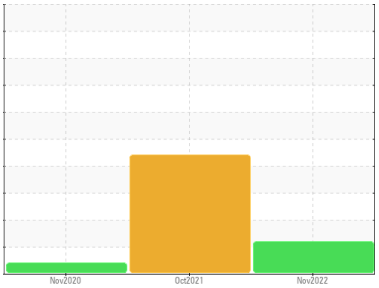
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
5864326 (S/N 5325)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

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	history1	history2
Sample Number		Client Info		**KCP47131D**	KCP37127	KCP34058
Sample Date		Client Info		**01 Nov 2022**	12 Oct 2021	19 Nov 2020
Machine Age	hrs	Client Info		**28053**	26950	20121
Oil Age	hrs	Client Info		**2500**	7000	3000
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**4**	▲ 20	0
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>3	**0**	<1	0
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**<1**	<1	0
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**2**	6	2
Tin	ppm	ASTM D5185m	>10	**0**	0	<1
Antimony	ppm	ASTM D5185m		**---**	1	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	19	9
Barium	ppm	ASTM D5185m	90	**0**	5	29
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	100	**51**	7	62
Calcium	ppm	ASTM D5185m	0	**0**	3	0
Phosphorus	ppm	ASTM D5185m	0	**15**	3	3
Zinc	ppm	ASTM D5185m	0	**10**	16	2
Sulfur	ppm	ASTM D5185m	23500	**21700**	33787	16350

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**1**	2	<1
Sodium	ppm	ASTM D5185m		**17**	1	13
Potassium	ppm	ASTM D5185m	>20	**4**	0	<1
Water	%	ASTM D6304	>0.05	**0.022**	▲ 0.391	0.020
ppm Water	ppm	ASTM D6304	>500	**220.4**	▲ 3910	206.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**5842**	---	---
Particles >6µm		ASTM D7647	>1300	**1163**	---	---
Particles >14µm		ASTM D7647	>80	▲ **84**	---	---
Particles >21µm		ASTM D7647	>20	▲ **32**	---	---
Particles >38µm		ASTM D7647	>4	**4**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/17/14**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.36**	0.303	0.372

OIL ANALYSIS REPORT

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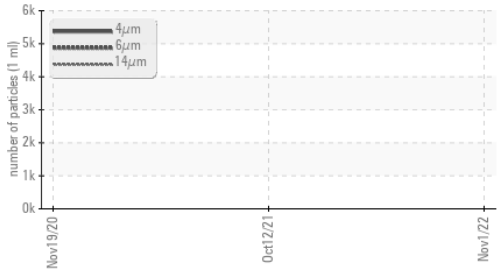
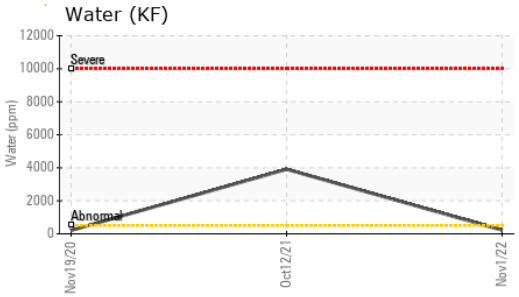
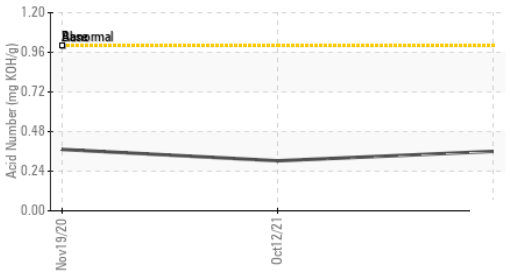
Particle Trend



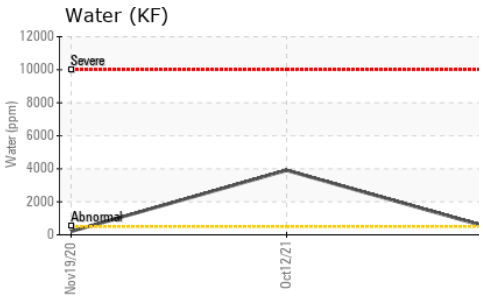
Water (KF)



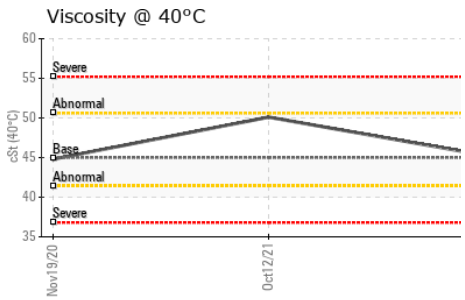
Acid Number



Water (KF)

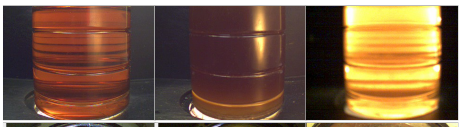


Viscosity @ 40°C



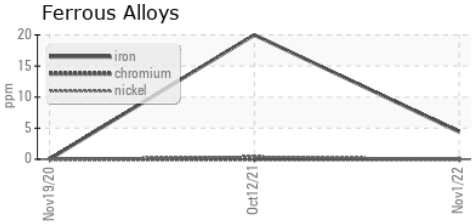
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	▲ 1.0	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**45.3**	50.1	44.8

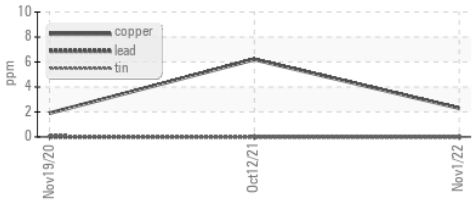
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

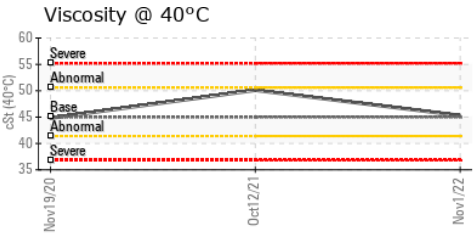
Ferrous Alloys



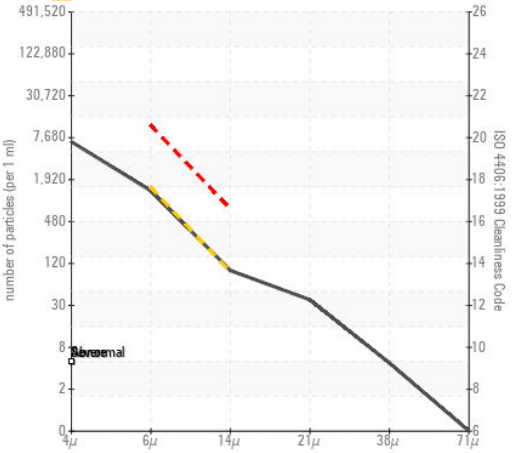
Non-ferrous Metals



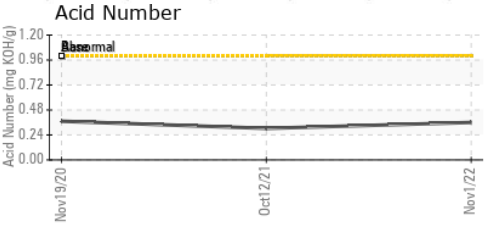
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP47131D **Received** : 08 Nov 2022
Lab Number : 05688452 **Diagnosed** : 10 Nov 2022
Unique Number : 10208024 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

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