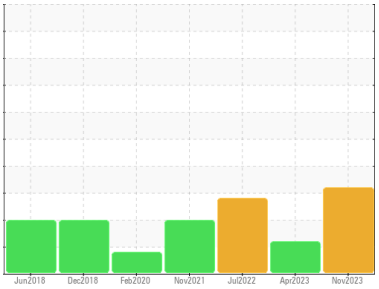
PROBLEM SUMMARY

Sample Rating Trend

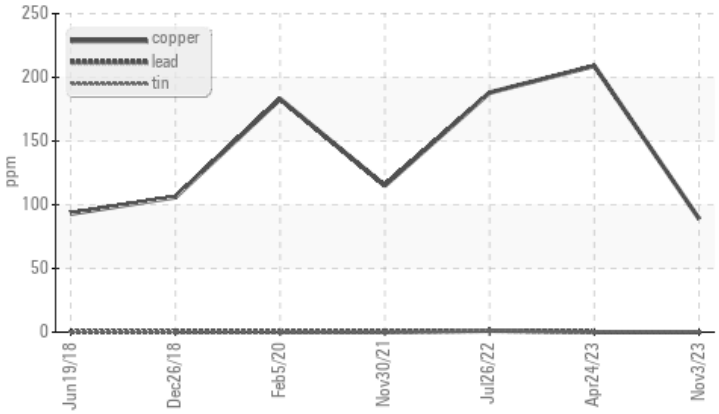


WEAR

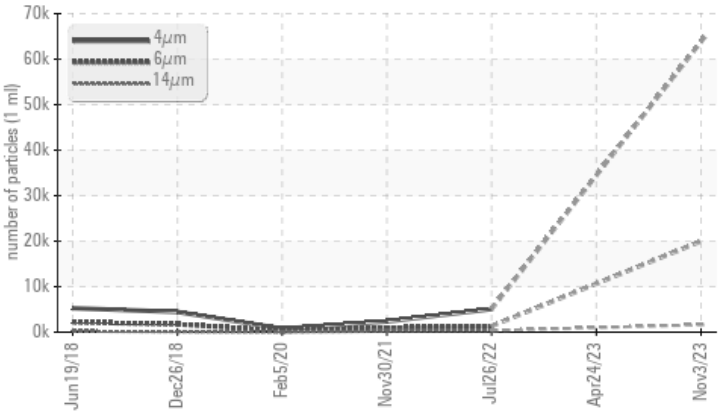
Machine Id
KAESER AS 20 6015902 (S/N 1237)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

Non-ferrous Metals



Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The 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	ABNORMAL
Copper	ppm	ASTM D5185m	>50	▲ **89**	▲ 209	▲ 188
Particles >6µm		ASTM D7647	>1300	▲ **19969**	---	▲ 1325
Particles >14µm		ASTM D7647	>80	▲ **1609**	---	▲ 341
Particles >21µm		ASTM D7647	>20	▲ **428**	---	▲ 98
Particles >38µm		ASTM D7647	>4	▲ **16**	---	▲ 5
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ **21/18**	---	▲ 18/16
Debris	scalar	*Visual	NONE	▲ **MODER**	▲ MODER	NONE

Customer Id: HARWAY
Sample No.: KCPA009065
Lab Number: 06013334
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 Apr 2023 Diag: Don Baldridge

WEAR

No corrective action is recommended at this time. The 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.The copper level is abnormal. All other 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

26 Jul 2022 Diag: Doug Bogart

WEAR

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.The copper level is abnormal. All other component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

30 Nov 2021 Diag: Angela Borella

WEAR

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The copper level is abnormal. All other component wear rates are normal. There is a high amount of particulates 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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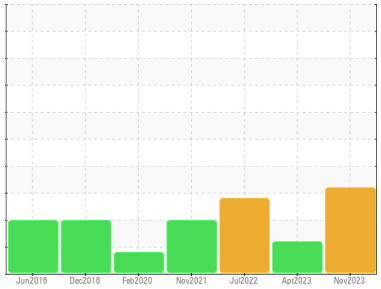
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
KAESER AS 20 6015902 (S/N 1237)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
The copper level has decreased, but is still abnormal. All other component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil. Moderate concentration of visible dirt/debris 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		**KCPA009065**	KCPA001444	KCP49485
Sample Date		Client Info		**03 Nov 2023**	24 Apr 2023	26 Jul 2022
Machine Age	hrs	Client Info		**57206**	36420	30382
Oil Age	hrs	Client Info		**0**	0	2274
Oil Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	2	5
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>3	**1**	0	<1
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**7**	17	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	1
Copper	ppm	ASTM D5185m	>50	▲ **89**	▲ 209	▲ 188
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m	90	**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m	90	**3**	2	0
Calcium	ppm	ASTM D5185m	2	**1**	0	0
Phosphorus	ppm	ASTM D5185m		**1**	2	0
Zinc	ppm	ASTM D5185m		**117**	12	170
Sulfur	ppm	ASTM D5185m		**16984**	14418	17324

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	0	<1
Sodium	ppm	ASTM D5185m		**<1**	<1	<1
Potassium	ppm	ASTM D5185m	>20	**0**	0	0
Water	%	ASTM D6304	>0.05	**0.008**	0.016	0.007
ppm Water	ppm	ASTM D6304	>500	**89.9**	168.4	74.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**63835**	---	5070
Particles >6µm		ASTM D7647	>1300	▲ **19969**	---	▲ 1325
Particles >14µm		ASTM D7647	>80	▲ **1609**	---	▲ 341
Particles >21µm		ASTM D7647	>20	▲ **428**	---	▲ 98
Particles >38µm		ASTM D7647	>4	▲ **16**	---	▲ 5
Particles >71µm		ASTM D7647	>3	**0**	---	1
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ **21/18**	---	▲ 18/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.32**	0.32	0.41

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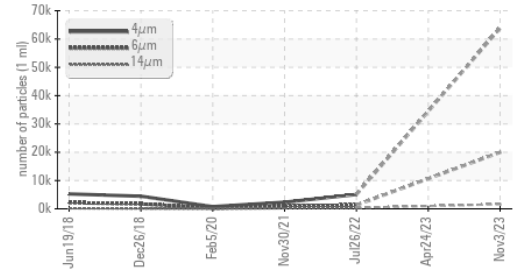
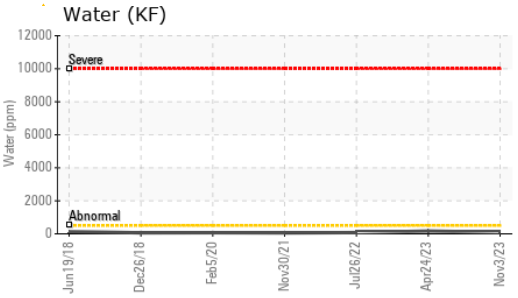
OIL ANALYSIS REPORT

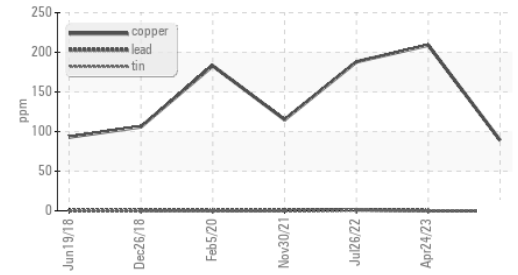
Particle Trend



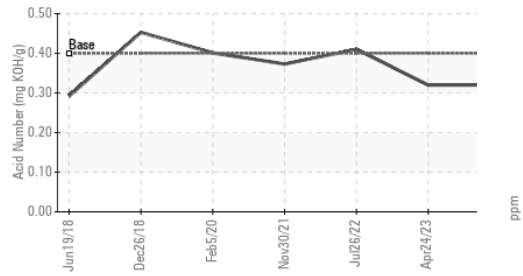
Water (KF)



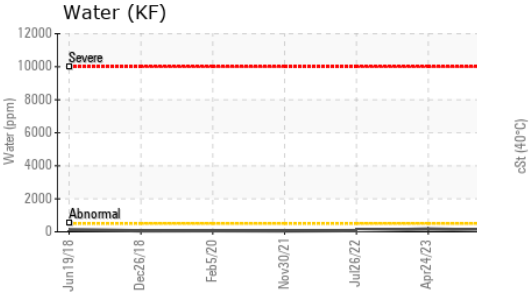
Non-ferrous Metals



Acid Number

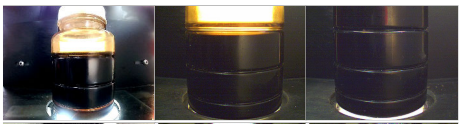
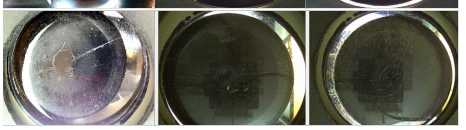


Water (KF)



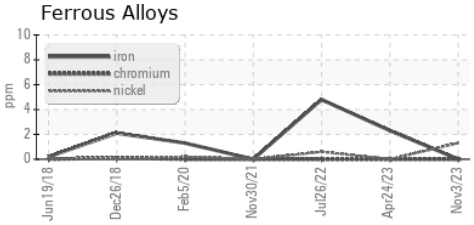
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **MODER**	▲ MODER	NONE
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**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**44.5**	44.2	44.1

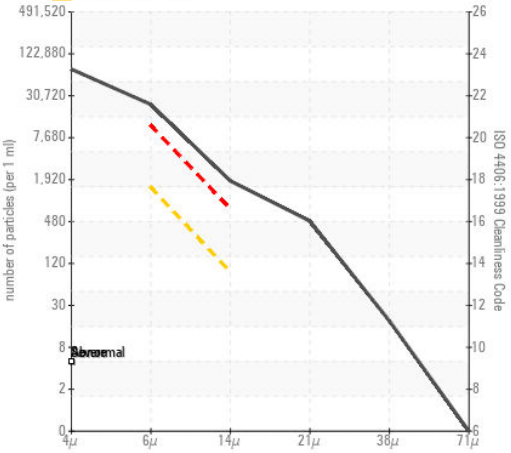
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

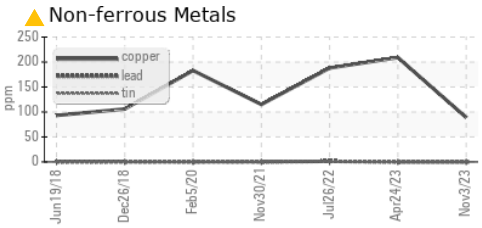
Ferrous Alloys



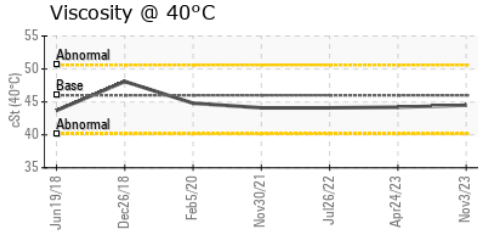
Particle Count



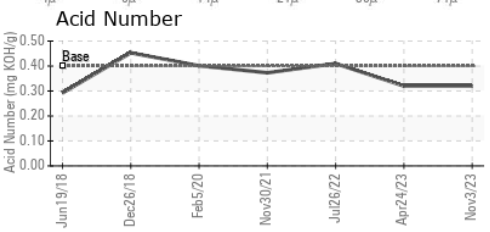
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA009065 **Received** : 20 Nov 2023
Lab Number : 06013334 **Diagnosed** : 22 Nov 2023
Unique Number : 10752478 **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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