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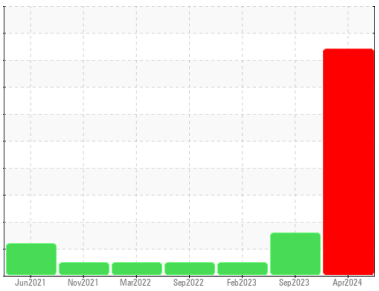
PROBLEM SUMMARY

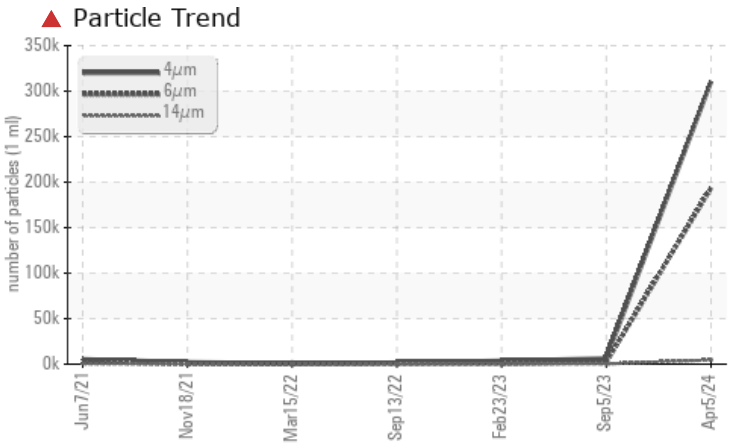
Sample Rating Trend

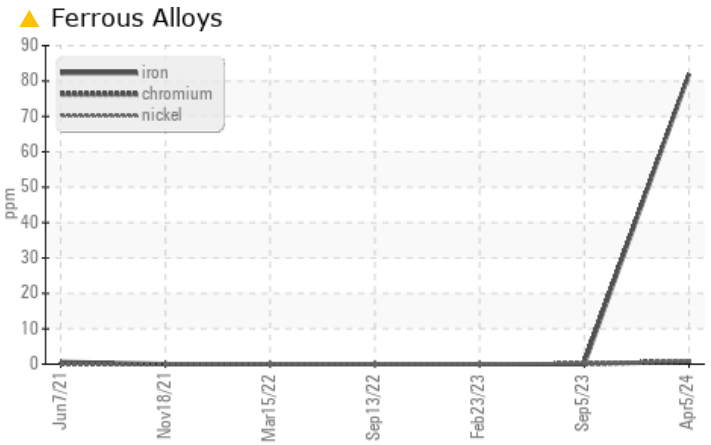


ISO

Machine Id
KAESER 7349808
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. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	▲ **82**	0	0
Particles >4µm		ASTM D7647		▲ **310405**	6226	3662
Particles >6µm		ASTM D7647	>1300	▲ **193724**	▲ 2181	745
Particles >14µm		ASTM D7647	>80	▲ **4611**	▲ 220	40
Particles >21µm		ASTM D7647	>20	▲ **171**	▲ 57	8
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **25/25/19**	▲ 20/18/15	19/17/12

Customer Id: AMAOAK
Sample No.: KCPA016954
Lab Number: 06146605
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
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angela.borella@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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

ISO

05 Sep 2023 Diag: Don Baldridge
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.All 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

NORMAL

23 Feb 2023 Diag: Angela Borella
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

NORMAL

13 Sep 2022 Diag: Don Baldridge
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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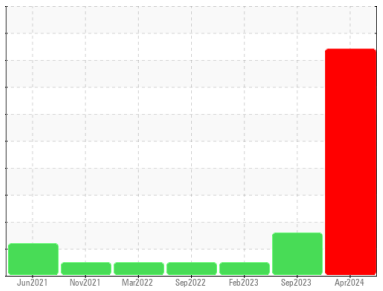
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
KAESER 7349808
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation
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.

Wear
The iron level is abnormal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KCPA016954**	KCP48197D	KCP55934
Sample Date		Client Info		**05 Apr 2024**	05 Sep 2023	23 Feb 2023
Machine Age	hrs	Client Info		**20814**	16111	13235
Oil Age	hrs	Client Info		**8000**	4000	3000
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**SEVERE**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	▲ **82**	0	0
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m	>3	**<1**	<1	0
Titanium	ppm	ASTM D5185m	>3	**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**1**	0	<1
Lead	ppm	ASTM D5185m	>10	**1**	0	0
Copper	ppm	ASTM D5185m	>50	**2**	1	<1
Tin	ppm	ASTM D5185m	>10	**1**	<1	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	0
Barium	ppm	ASTM D5185m	90	**26**	33	49
Molybdenum	ppm	ASTM D5185m	0	**1**	0	0
Manganese	ppm	ASTM D5185m		**2**	<1	1
Magnesium	ppm	ASTM D5185m	100	**68**	66	96
Calcium	ppm	ASTM D5185m	0	**5**	1	2
Phosphorus	ppm	ASTM D5185m	0	**4**	7	0
Zinc	ppm	ASTM D5185m	0	**6**	6	27
Sulfur	ppm	ASTM D5185m	23500	**20521**	24702	21870

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**2**	2	1
Sodium	ppm	ASTM D5185m		**15**	16	16
Potassium	ppm	ASTM D5185m	>20	**7**	4	6
Water	%	ASTM D6304	>0.05	**0.018**	0.026	0.015
ppm Water	ppm	ASTM D6304	>500	**190**	263.4	156.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		▲ **310405**	6226	3662
Particles >6µm		ASTM D7647	>1300	▲ **193724**	▲ 2181	745
Particles >14µm		ASTM D7647	>80	▲ **4611**	▲ 220	40
Particles >21µm		ASTM D7647	>20	▲ **171**	▲ 57	8
Particles >38µm		ASTM D7647	>4	**1**	1	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **25/25/19**	▲ 20/18/15	19/17/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.42**	0.36	0.43

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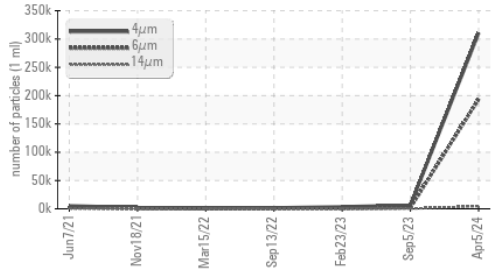
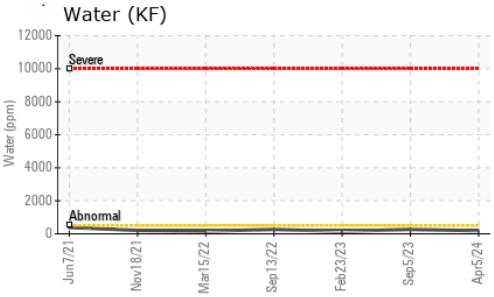
OIL ANALYSIS REPORT

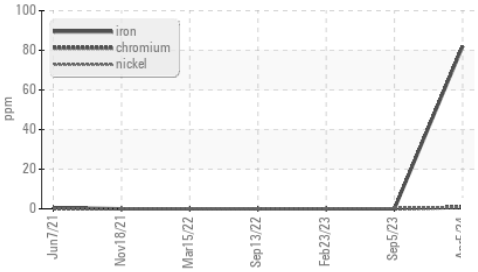
Particle Trend



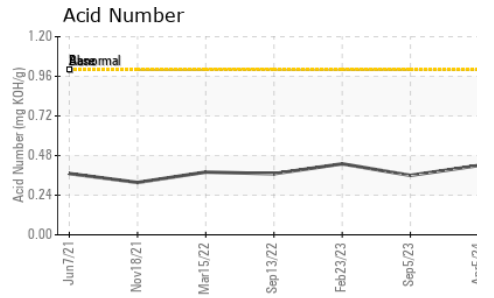
Water (KF)



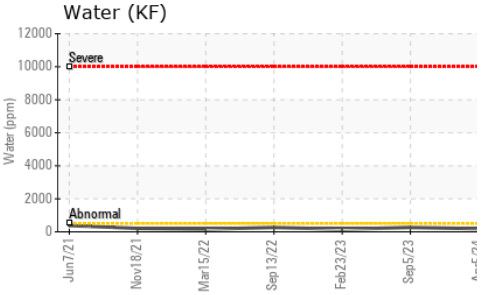
Ferrous Alloys



Acid Number

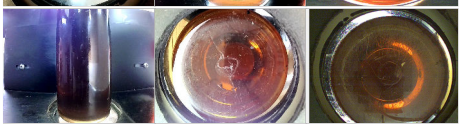


Water (KF)



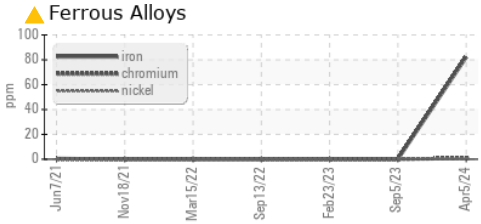
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	VLITE
Sand/Dirt	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	45	**49.9**	49.2	48.5

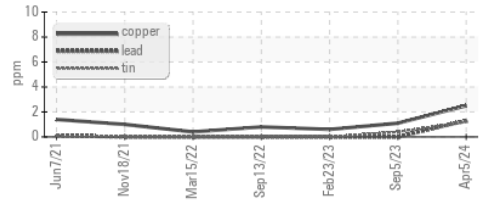
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

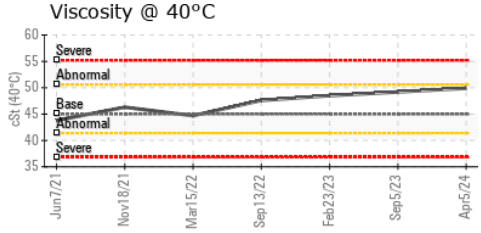
Ferrous Alloys



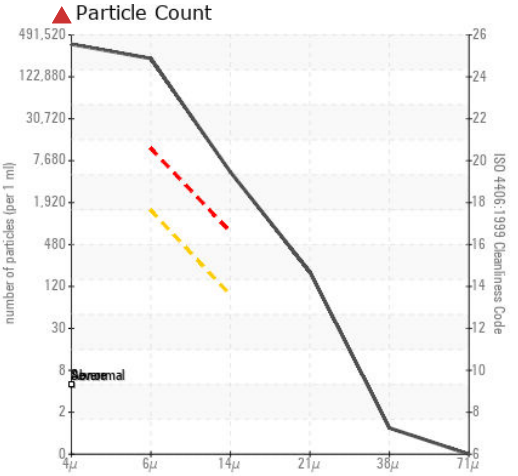
Non-ferrous Metals



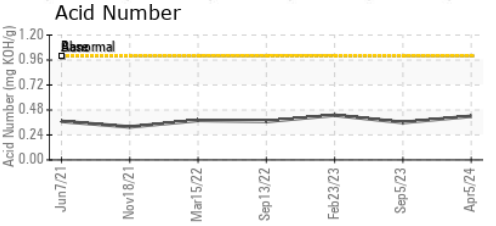
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016954
Lab Number : 06146605
Unique Number : 10976683
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 16 Apr 2024 - Angela Borella

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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