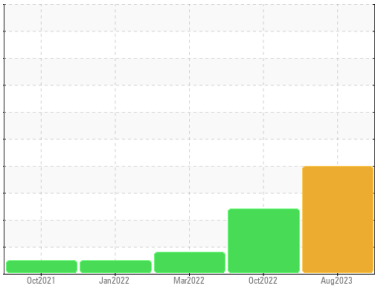
PROBLEM SUMMARY

Sample Rating Trend

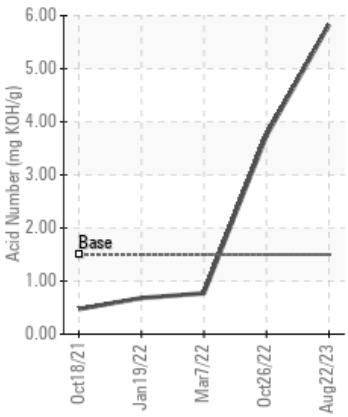


DEGRADATION

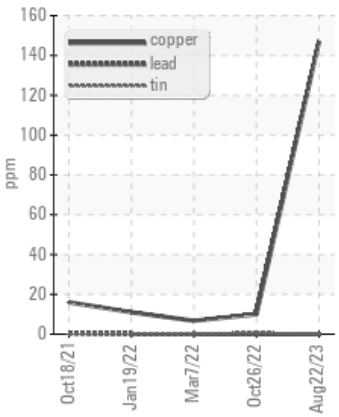
Machine Id
KAESER 7744738
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

COMPONENT CONDITION SUMMARY

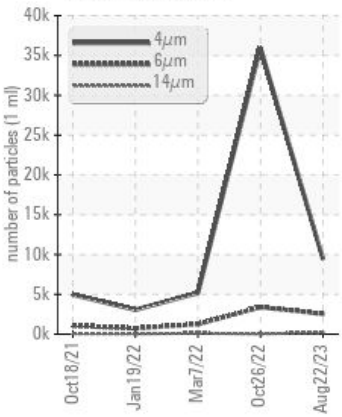
▲ Acid Number



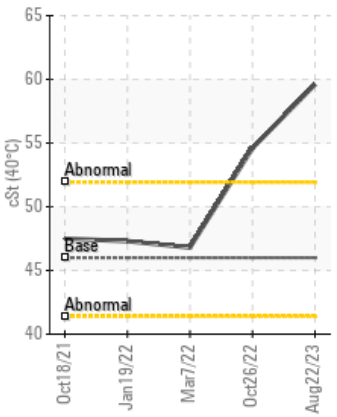
▲ Non-ferrous Metals



▲ Particle Trend



▲ Viscosity @ 40°C



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION
Copper	ppm	ASTM D5185m	>50	▲ **147**	10	7
Particles >6µm		ASTM D7647	>1300	▲ **2543**	▲ 3401	1258
Particles >14µm		ASTM D7647	>80	▲ **172**	38	▲ 110
Particles >21µm		ASTM D7647	>20	▲ **52**	9	25
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/19/15**	▲ 22/19/12	▲ 20/17/14
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	▲ **5.83**	▲ 3.74	0.77
Visc @ 40°C	cSt	ASTM D445	46	▲ **59.6**	▲ 54.6	46.8

Customer Id: SOLFED
Sample No.: KC05969671
Lab Number: 05969671
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
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	---	---	?	We recommend that you drain the oil from the component if this has not already been done.

HISTORICAL DIAGNOSIS

26 Oct 2022 Diag: Doug Bogart

DEGRADATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is above the recommended limit. The oil viscosity is higher than normal.

view report

07 Mar 2022 Diag: Angela Borella

ISO

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 moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

19 Jan 2022 Diag: Angela Borella

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. 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 acceptable for the time in service.

view report

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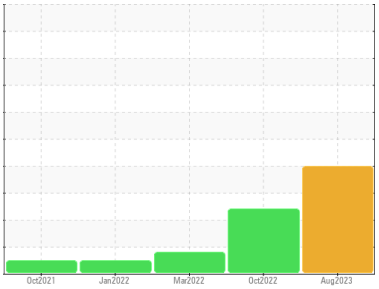
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
KAESER 7744738
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

Recommendation
We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample in 500 hours to monitor this condition.

Wear
The copper level is abnormal. All other component wear rates are normal.

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

Fluid Condition
The AN level is above the recommended limit. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KC05969671**	KC108047	KC96708
Sample Date		Client Info		**22 Aug 2023**	26 Oct 2022	07 Mar 2022
Machine Age	hrs	Client Info		**17111**	11090	6895
Oil Age	hrs	Client Info		**0**	4195	2974
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**6**	3	<1
Chromium	ppm	ASTM D5185m	>10	**0**	<1	0
Nickel	ppm	ASTM D5185m	>3	**1**	<1	<1
Titanium	ppm	ASTM D5185m	>3	**0**	<1	0
Silver	ppm	ASTM D5185m	>2	**0**	1	<1
Aluminum	ppm	ASTM D5185m	>10	**2**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	▲ **147**	10	7
Tin	ppm	ASTM D5185m	>10	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	0
Manganese	ppm	ASTM D5185m		**<1**	2	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	4
Calcium	ppm	ASTM D5185m		**0**	0	0
Phosphorus	ppm	ASTM D5185m	500	**65**	73	252
Zinc	ppm	ASTM D5185m		**102**	<1	84

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	2	<1
Sodium	ppm	ASTM D5185m		**10**	3	2
Potassium	ppm	ASTM D5185m	>20	**1**	<1	0
Water	%	ASTM D6304	>0.05	**0.036**	0.013	0.001
ppm Water	ppm	ASTM D6304	>500	**368.8**	132.7	11.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**9439**	35982	5175
Particles >6µm		ASTM D7647	>1300	▲ **2543**	▲ 3401	1258
Particles >14µm		ASTM D7647	>80	▲ **172**	38	▲ 110
Particles >21µm		ASTM D7647	>20	▲ **52**	9	25
Particles >38µm		ASTM D7647	>4	**3**	0	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/19/15**	▲ 22/19/12	▲ 20/17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	▲ **5.83**	▲ 3.74	0.77

KAESER COMPRESSORS
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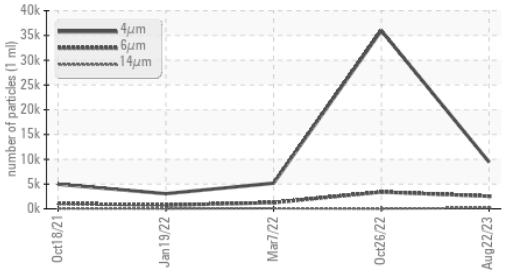
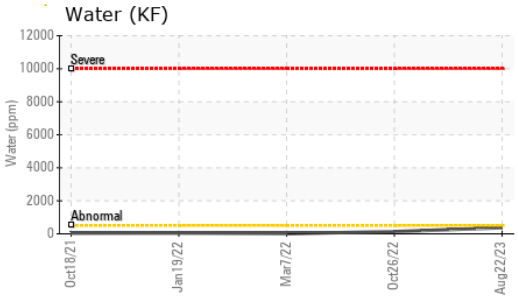
OIL ANALYSIS REPORT

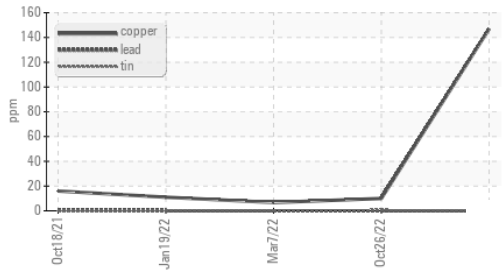
Particle Trend



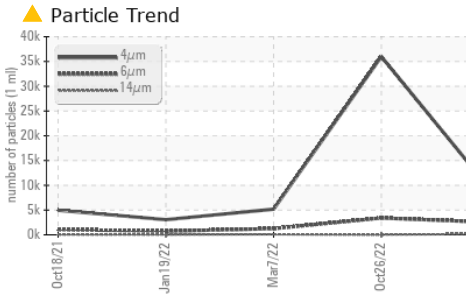
Water (KF)



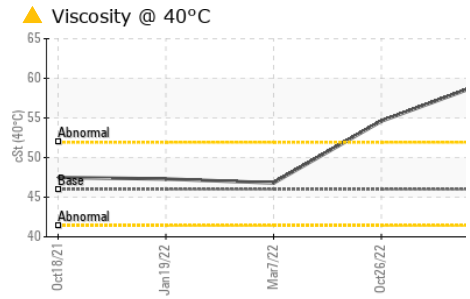
Non-ferrous Metals



Particle Trend

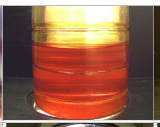
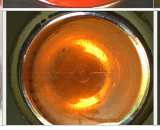
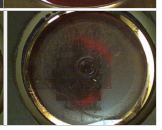


Viscosity @ 40°C



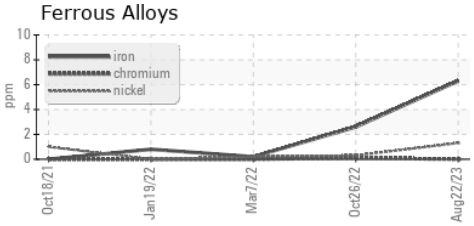
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	▲ **59.6**	▲ 54.6	46.8

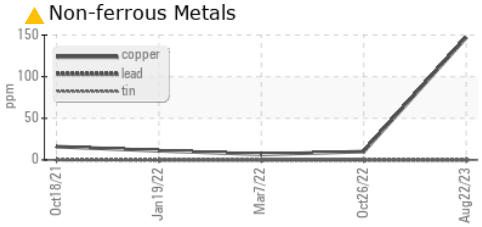
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

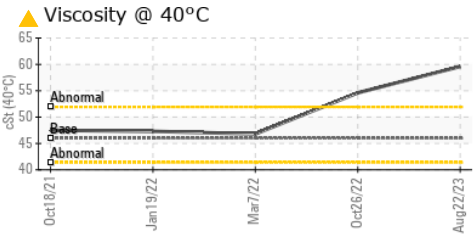
Ferrous Alloys



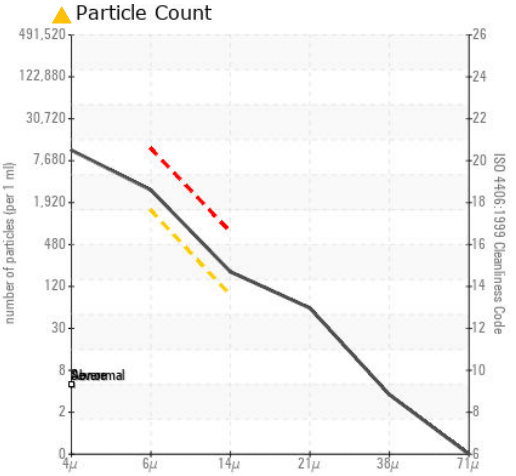
Non-ferrous Metals



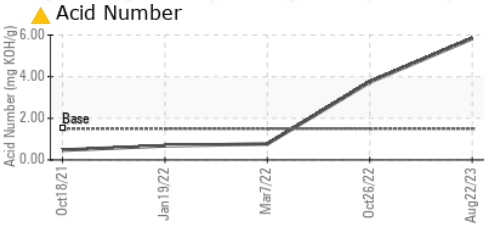
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05969671
Lab Number : 05969671
Unique Number : 10676222
Test Package : IND 2

Received : 04 Oct 2023
Diagnosed : 09 Oct 2023
Diagnostician : 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)

SOLO CUP
1000 INDUSTRIAL PARK RD
FEDERALSBURG, MD
US 21632
Contact: ERIKA LANGLEY
ERIKA.LANLEY@DART.BIZ
T:
F: