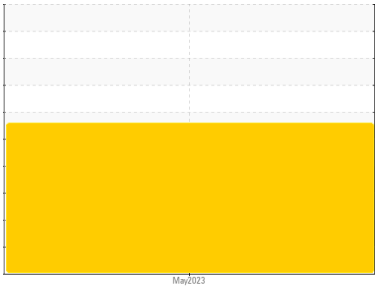
PROBLEM SUMMARY

Sample Rating Trend

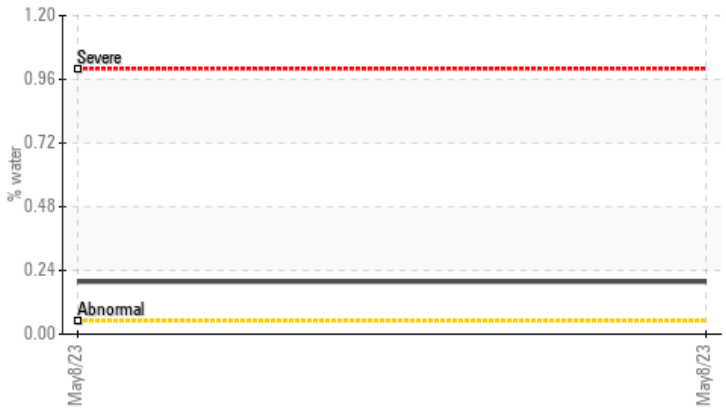


WATER

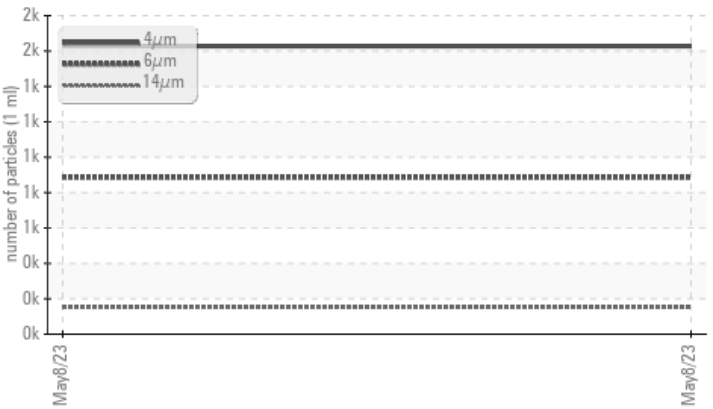
Machine Id
KAESER AIR TOWER 5C 8434498 (S/N 1422)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

Water



Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	---
Water	%	ASTM D6304	>0.05	▲ **0.198**	---	---
ppm Water	ppm	ASTM D6304	>500	▲ **1980**	---	---
Particles >14µm		ASTM D7647	>80	▲ **151**	---	---
Particles >21µm		ASTM D7647	>20	▲ **51**	---	---
Particles >38µm		ASTM D7647	>4	▲ **8**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **18/17/14**	---	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	---	---
Free Water	scalar	*Visual		▲ **1.0**	---	---

Customer Id: USGSTP
Sample No.: KC102751
Lab Number: 05850202
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@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
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

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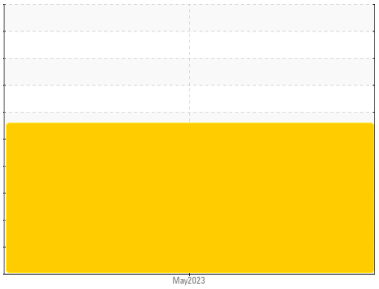
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER AIR TOWER 5C 8434498 (S/N 1422)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. We recommend an early resample in 500 hours to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Appearance is hazy. There is a moderate amount of particulates present in the oil. Free water present. There is a light concentration of water 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		**KC102751**	---	---
Sample Date		Client Info		**08 May 2023**	---	---
Machine Age	hrs	Client Info		**136**	---	---
Oil Age	hrs	Client Info		**3**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	---	---
Barium	ppm	ASTM D5185m	90	**24**	---	---
Molybdenum	ppm	ASTM D5185m	0	**0**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m	100	**44**	---	---
Calcium	ppm	ASTM D5185m	0	**0**	---	---
Phosphorus	ppm	ASTM D5185m	0	**4**	---	---
Zinc	ppm	ASTM D5185m	0	**0**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	---	---
Sodium	ppm	ASTM D5185m		**3**	---	---
Potassium	ppm	ASTM D5185m	>20	**1**	---	---
Water	%	ASTM D6304	>0.05	▲ **0.198**	---	---
ppm Water	ppm	ASTM D6304	>500	▲ **1980**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1627**	---	---
Particles >6µm		ASTM D7647	>1300	**886**	---	---
Particles >14µm		ASTM D7647	>80	▲ **151**	---	---
Particles >21µm		ASTM D7647	>20	▲ **51**	---	---
Particles >38µm		ASTM D7647	>4	▲ **8**	---	---
Particles >71µm		ASTM D7647	>3	**1**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **18/17/14**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.31**	---	---

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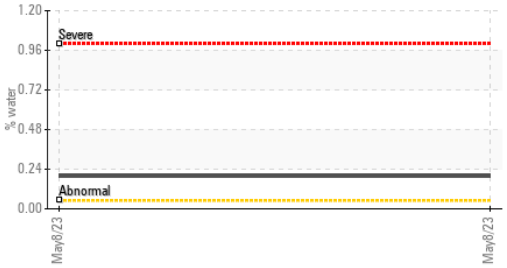
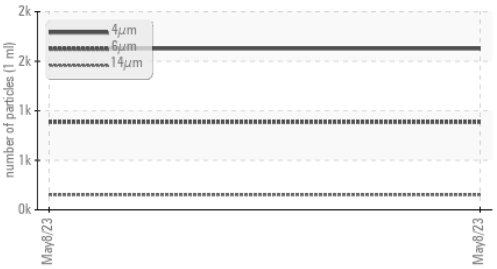
OIL ANALYSIS REPORT

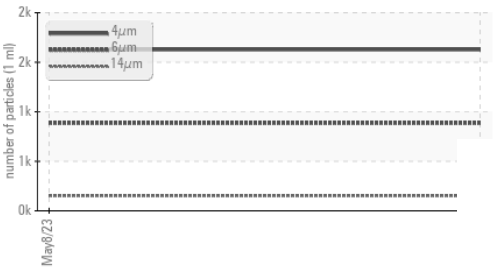
Water



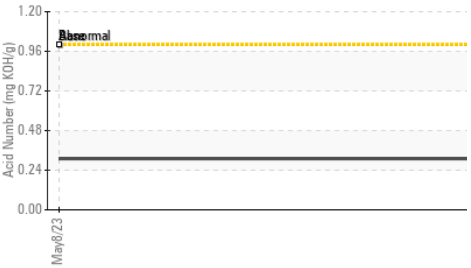
Particle Trend



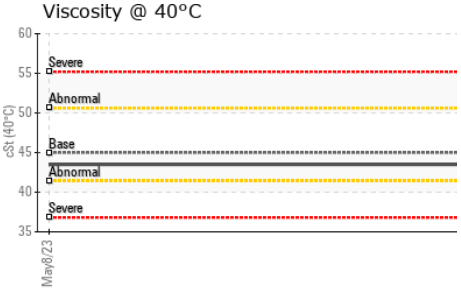
Particle Trend



Acid Number

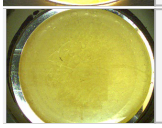


Viscosity @ 40°C



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**LIGHT**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.05	**0.2%**	---	---
Free Water	scalar	*Visual		▲ **1.0**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**43.5**	---	---

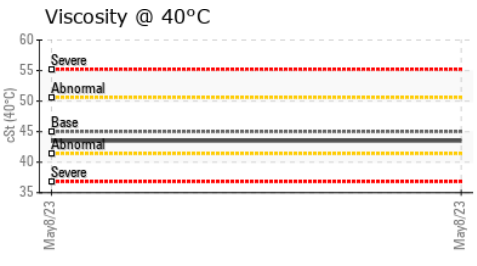
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

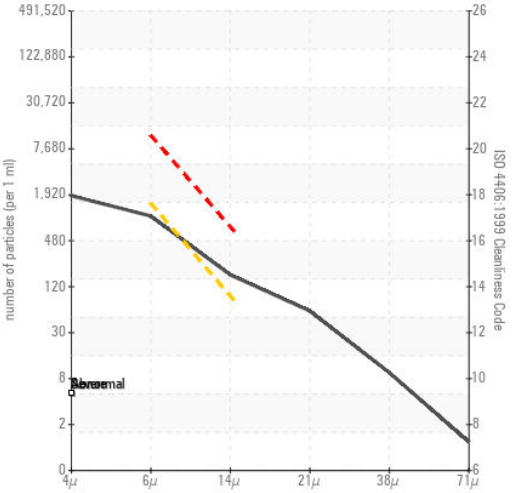
Ferrous Alloys

Non-ferrous Metals

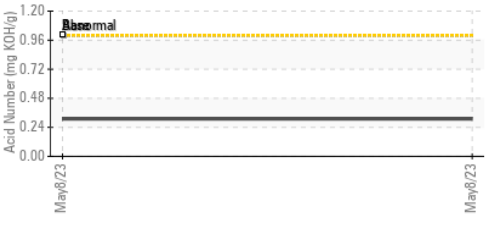
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC102751
Lab Number : 05850202
Unique Number : 10479557
Test Package : IND 2

Received : 17 May 2023
Diagnosed : 22 May 2023
Diagnostician : Jonathan Hester

Certificate L2367

US GEOLOGICAL SURVEY
600 4TH ST N
ST PETE, FL
US 33701
Contact: Service Manager
T:
F:

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)