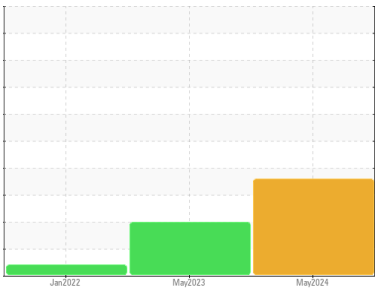
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER 7120849
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation
The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear
All component wear rates are normal.

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

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KC06216877**	KC05883340	KC05450131
Sample Date		Client Info		**15 May 2024**	26 May 2023	18 Jan 2022
Machine Age	hrs	Client Info		**17152**	11230	4311
Oil Age	hrs	Client Info		**0**	0	1118
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	**<1**	<1	<1
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	**<1**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**3**	0	0
Lead	ppm	ASTM D5185m	>10	**<1**	<1	0
Copper	ppm	ASTM D5185m	>50	**10**	6	10
Tin	ppm	ASTM D5185m	>10	**<1**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	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	23
Barium	ppm	ASTM D5185m	90	**1**	17	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	90	**2**	46	2
Calcium	ppm	ASTM D5185m	2	**0**	0	5
Phosphorus	ppm	ASTM D5185m		**5**	0	4
Zinc	ppm	ASTM D5185m		**12**	8	33

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	0	<1
Sodium	ppm	ASTM D5185m		**0**	11	63
Potassium	ppm	ASTM D5185m	>20	**1**	23	16
Water	%	ASTM D6304	>0.05	▲ **0.078**	0.013	0.025
ppm Water	ppm	ASTM D6304	>500	▲ **786**	131.6	251.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**3839**	20105	---
Particles >6µm		ASTM D7647	>1300	▲ **1561**	▲ 5695	---
Particles >14µm		ASTM D7647	>80	▲ **172**	▲ 334	---
Particles >21µm		ASTM D7647	>20	▲ **53**	▲ 86	---
Particles >38µm		ASTM D7647	>4	▲ **4**	▲ 6	---
Particles >71µm		ASTM D7647	>3	**0**	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **19/18/15**	▲ 22/20/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.26**	0.28	0.107

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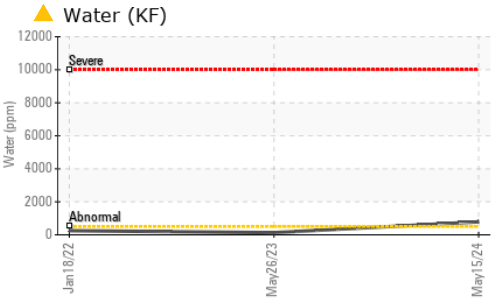
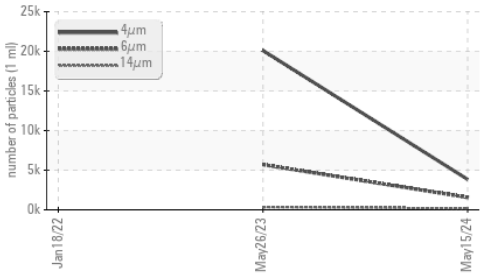
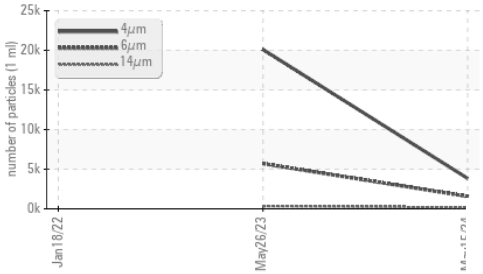
Water (KF)



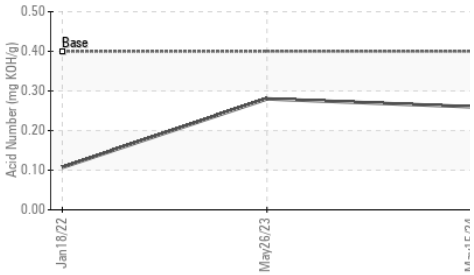
Particle Trend



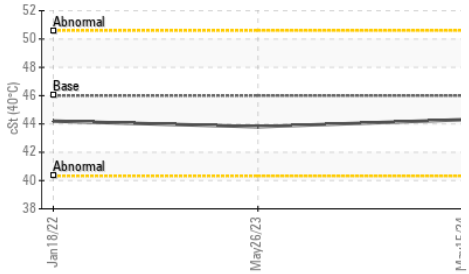
Particle Trend



Acid Number

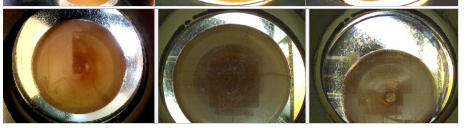


Viscosity @ 40°C



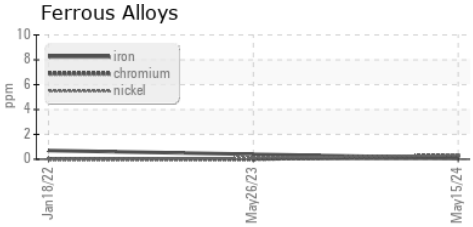
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	▲ MODER
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**44.3**	43.8	44.2

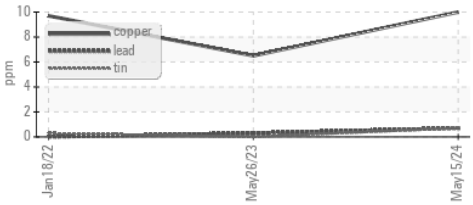
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

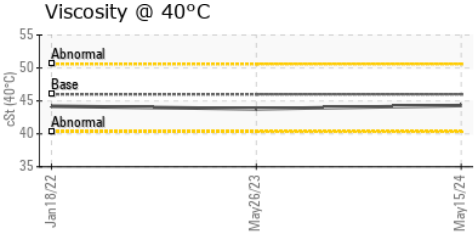
Ferrous Alloys



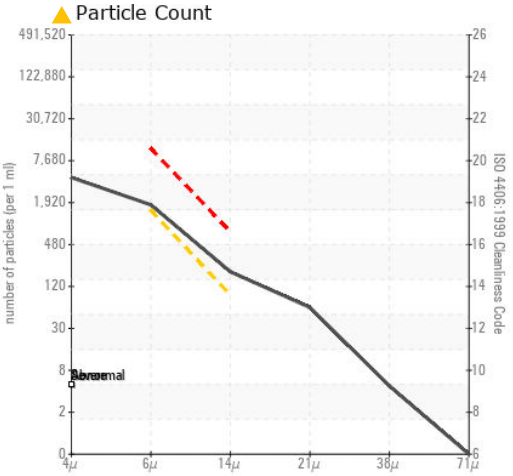
Non-ferrous Metals



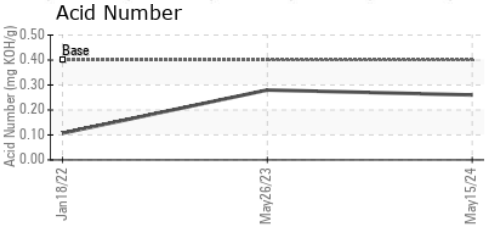
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC06216877
Lab Number : 06216877
Unique Number : 11089741
Test Package : IND 2

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Don Baldridge

CARMAX #6140
4300 ATLANTA HWY
BOGART, GA
US 30622
Contact: Service Manager

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)

T:
F: