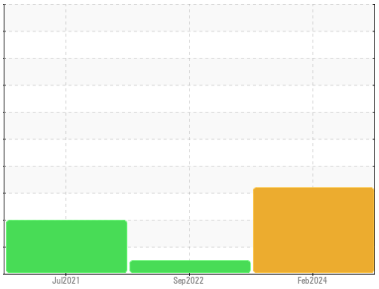
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER SM 10 7181402 (S/N 1281)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- LTR)

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 moderate 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		**KC06122325**	KC05656267	KC05301264
Sample Date		Client Info		**16 Feb 2024**	08 Sep 2022	02 Jul 2021
Machine Age	hrs	Client Info		**4973**	3039	1254
Oil Age	hrs	Client Info		**0**	693	1254
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	0	<1
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>3	**0**	0	0
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**0**	<1	0
Lead	ppm	ASTM D5185m	>10	**<1**	<1	<1
Copper	ppm	ASTM D5185m	>50	**7**	5	1
Tin	ppm	ASTM D5185m	>10	**<1**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	0
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	13
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m	90	**1**	28	53
Calcium	ppm	ASTM D5185m	2	**0**	0	<1
Phosphorus	ppm	ASTM D5185m		**0**	4	5
Zinc	ppm	ASTM D5185m		**0**	6	4

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	<1	0
Sodium	ppm	ASTM D5185m		**3**	6	12
Potassium	ppm	ASTM D5185m	>20	**0**	5	6
Water	%	ASTM D6304	>0.05	▲ **0.178**	0.025	▲ 0.065
ppm Water	ppm	ASTM D6304	>500	▲ **1780**	254.9	▲ 653.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1366**	1596	13737
Particles >6µm		ASTM D7647	>1300	**744**	546	▲ 5442
Particles >14µm		ASTM D7647	>80	● **127**	32	71
Particles >21µm		ASTM D7647	>20	● **43**	8	12
Particles >38µm		ASTM D7647	>4	● **7**	1	0
Particles >71µm		ASTM D7647	>3	**1**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● **18/17/14**	18/16/12	▲ 20/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.31**	0.27	0.325

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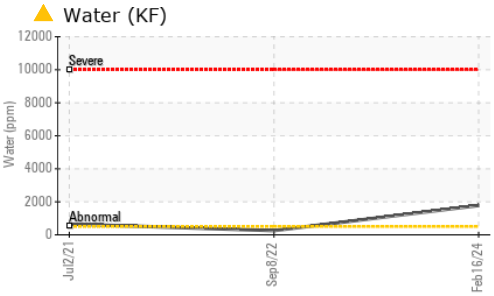
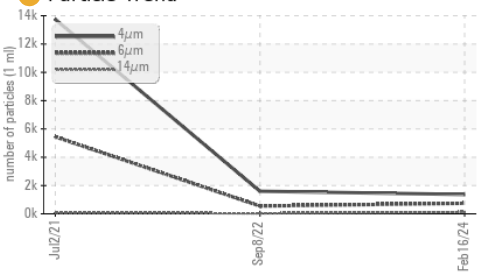
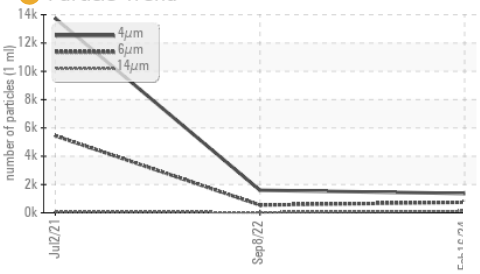
Water (KF)



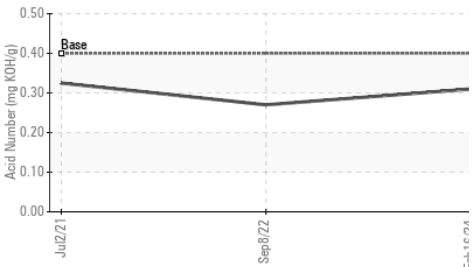
Particle Trend



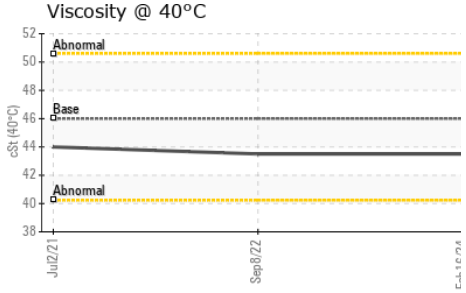
Particle Trend



Acid Number

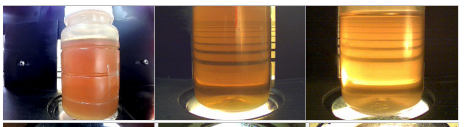
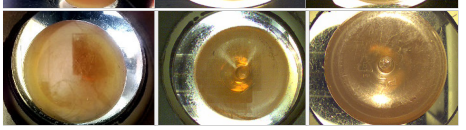


Viscosity @ 40°C



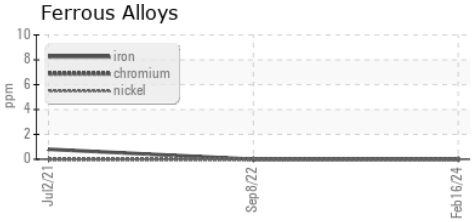
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	▲ **0.2%**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**43.5**	43.5	44.0

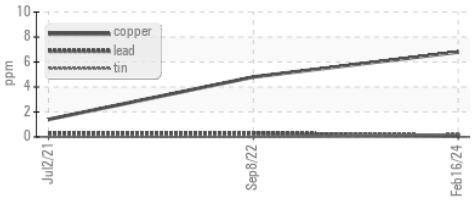
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

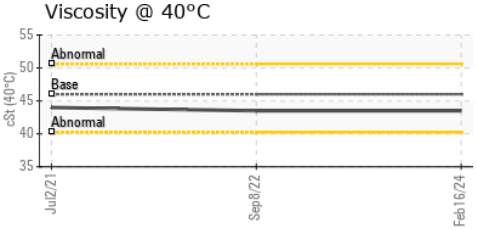
Ferrous Alloys



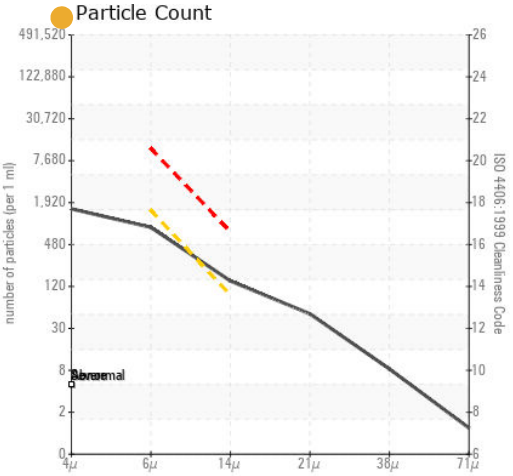
Non-ferrous Metals



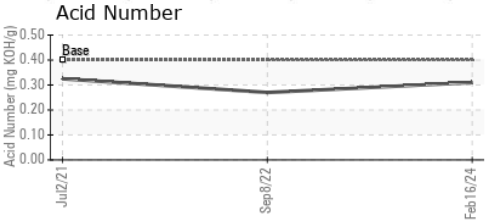
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC06122325
Lab Number : 06122325
Unique Number : 10936476
Test Package : IND 2

Received : 19 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Don Baldridge

UNIVERSITY TIRE
1170 MITCHELL BRIDGE RD
ATHENS, GA
US 30606
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: