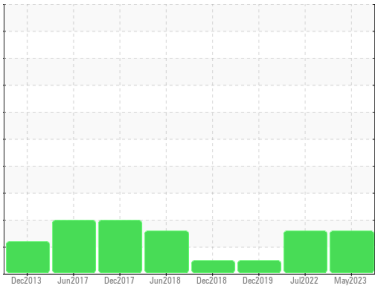
PROBLEM SUMMARY

Sample Rating Trend

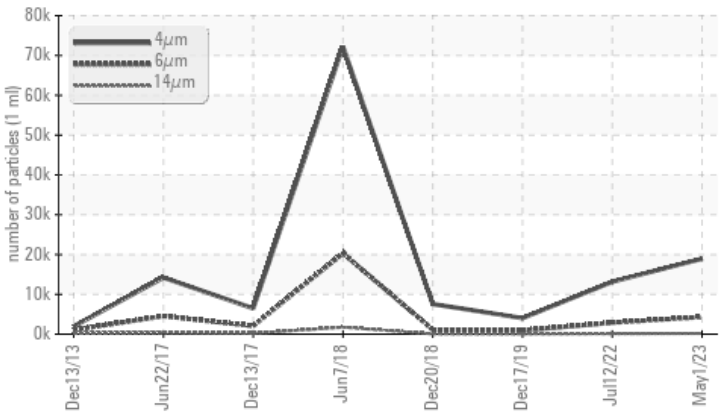


ISO

Machine Id
KAESER SM 10 4403628 (S/N 1232)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- LTR)

COMPONENT CONDITION SUMMARY

Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Particles >6µm		ASTM D7647	>1300	▲ **4306**	▲ 2885	950
Particles >14µm		ASTM D7647	>80	▲ **184**	▲ 127	51
Particles >21µm		ASTM D7647	>20	▲ **40**	▲ 21	13
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **21/19/15**	▲ 21/19/14	17/13

Customer Id: PENWIX
Sample No.: KCPA000306
Lab Number: 05933669
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

12 Jul 2022 Diag: Don Baldridge

ISO

No corrective action is recommended at this time. 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 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

17 Dec 2019 Diag: Don Baldridge

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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

20 Dec 2018 Diag: Angela Borella

NORMAL

No corrective action is recommended at this time. 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. 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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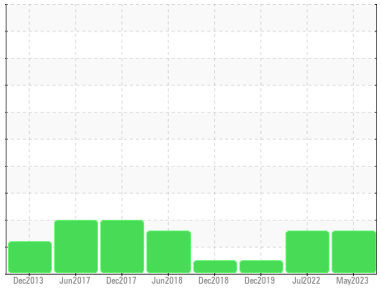
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
KAESER SM 10 4403628 (S/N 1232)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- LTR)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates 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		**KCPA000306**	KCP44616	KCP21490
Sample Date		Client Info		**01 May 2023**	12 Jul 2022	17 Dec 2019
Machine Age	hrs	Client Info		**13246**	12561	11067
Oil Age	hrs	Client Info		**0**	1494	3000
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**<1**	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	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**1**	5	6
Tin	ppm	ASTM D5185m	>10	**0**	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**	0	0
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m	100	**31**	10	4
Calcium	ppm	ASTM D5185m	0	**2**	0	0
Phosphorus	ppm	ASTM D5185m	0	**2**	<1	6
Zinc	ppm	ASTM D5185m	0	**14**	37	27
Sulfur	ppm	ASTM D5185m	23500	**23699**	18275	18647

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	0	2
Sodium	ppm	ASTM D5185m		**12**	7	0
Potassium	ppm	ASTM D5185m	>20	**2**	3	<1
Water	%	ASTM D6304	>0.05	**0.010**	0.003	0.005
ppm Water	ppm	ASTM D6304	>500	**107.4**	34.3	52.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**18946**	13160	4019
Particles >6µm		ASTM D7647	>1300	▲ **4306**	▲ 2885	950
Particles >14µm		ASTM D7647	>80	▲ **184**	▲ 127	51
Particles >21µm		ASTM D7647	>20	▲ **40**	▲ 21	13
Particles >38µm		ASTM D7647	>4	**0**	1	3
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **21/19/15**	▲ 21/19/14	17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.30**	0.26	0.390

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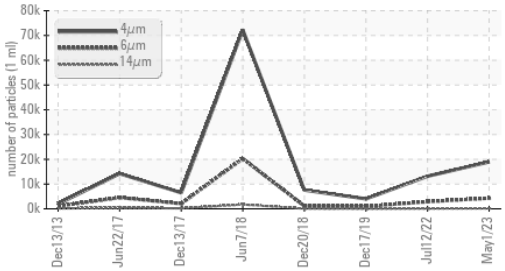
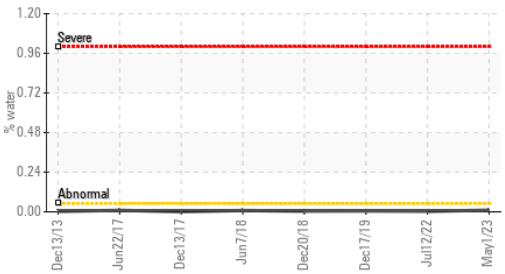
OIL ANALYSIS REPORT

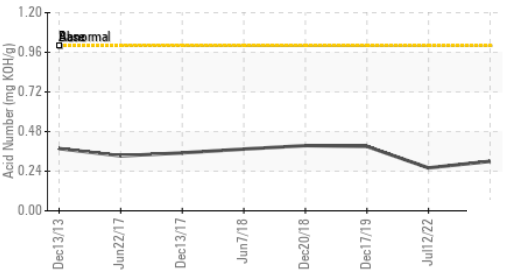
Particle Trend



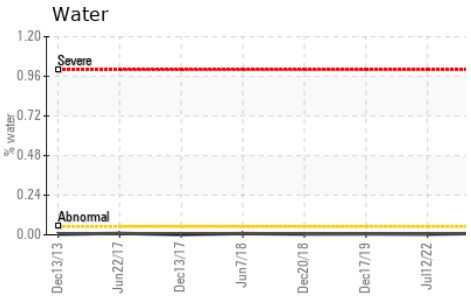
Water



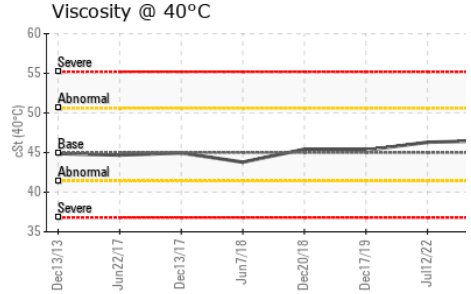
Acid Number



Water

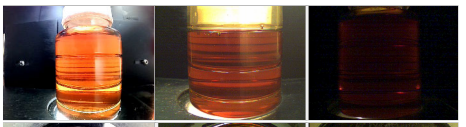
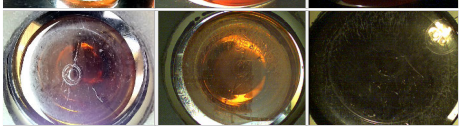


Viscosity @ 40°C



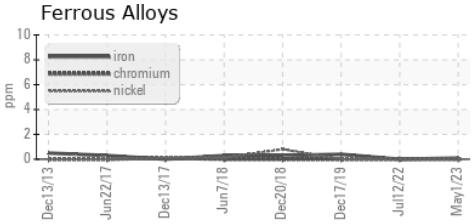
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	45	**46.5**	46.3	45.3

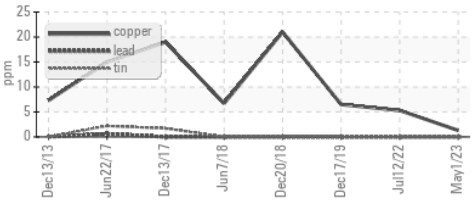
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

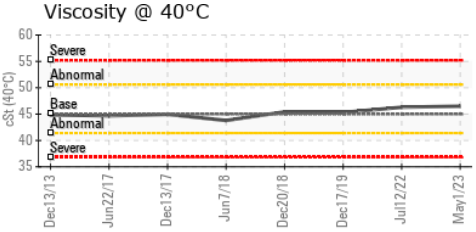
Ferrous Alloys



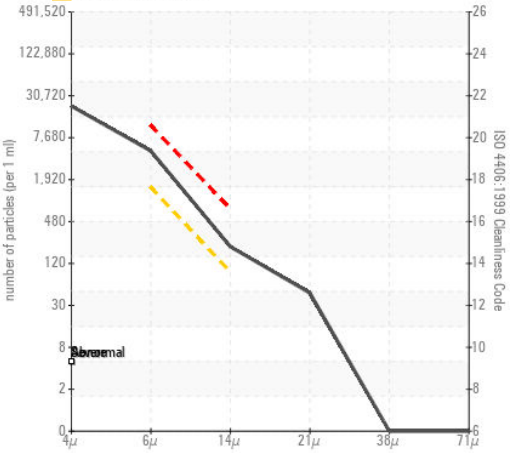
Non-ferrous Metals



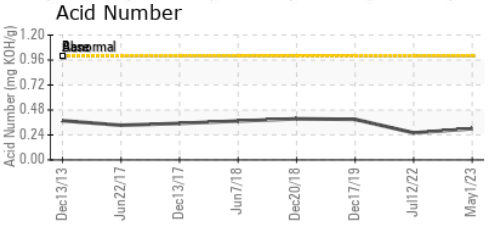
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA000306 **Received** : 24 Aug 2023
Lab Number : 05933669 **Diagnosed** : 25 Aug 2023
Unique Number : 10618940 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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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WIXOM, MI
US 48393
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