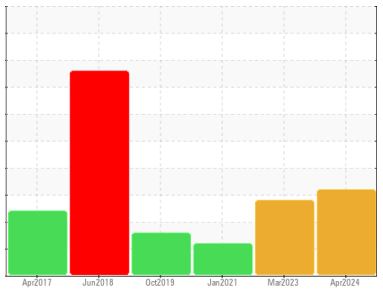
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER AIRCENTER SM 10 3225668 (S/N 1287)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. 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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KCPA016852**	KCP54127	KCP27819
Sample Date		Client Info		**01 Apr 2024**	03 Mar 2023	19 Jan 2021
Machine Age	hrs	Client Info		**0**	23731	23411
Oil Age	hrs	Client Info		**0**	23731	319
Oil Changed		Client Info		**N/A**	Changed	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**1**	0	<1
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m	>3	**2**	0	0
Titanium	ppm	ASTM D5185m	>3	**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**1**	<1	0
Lead	ppm	ASTM D5185m	>10	**2**	0	<1
Copper	ppm	ASTM D5185m	>50	**15**	9	4
Tin	ppm	ASTM D5185m	>10	**1**	0	0
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**	0	0
Barium	ppm	ASTM D5185m	90	**1**	1	0
Molybdenum	ppm	ASTM D5185m	0	**1**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	100	**26**	18	29
Calcium	ppm	ASTM D5185m	0	**8**	<1	0
Phosphorus	ppm	ASTM D5185m	0	**9**	1	3
Zinc	ppm	ASTM D5185m	0	**68**	133	67
Sulfur	ppm	ASTM D5185m	23500	**21336**	23741	20212

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	2	0
Sodium	ppm	ASTM D5185m		**4**	15	25
Potassium	ppm	ASTM D5185m	>20	**3**	<1	3
Water	%	ASTM D6304	>0.05	▲ **0.055**	▲ 0.104	0.008
ppm Water	ppm	ASTM D6304	>500	▲ **550**	▲ 1040	84.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1766**	---	8331
Particles >6µm		ASTM D7647	>1300	**962**	---	1663
Particles >14µm		ASTM D7647	>80	▲ **164**	---	127
Particles >21µm		ASTM D7647	>20	▲ **55**	---	40
Particles >38µm		ASTM D7647	>4	▲ **9**	---	2
Particles >71µm		ASTM D7647	>3	**1**	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **18/17/15**	---	18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.34**	0.25	0.156

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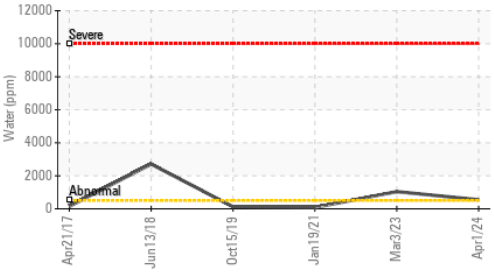
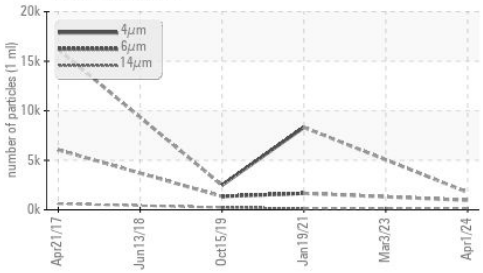
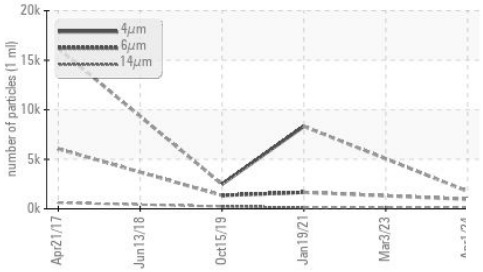
Water (KF)



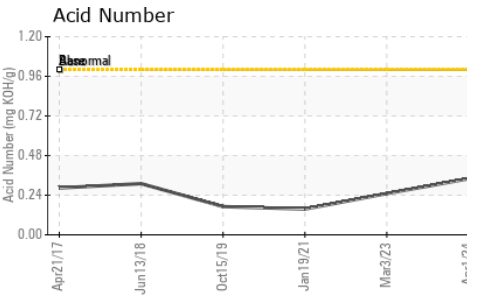
Particle Trend



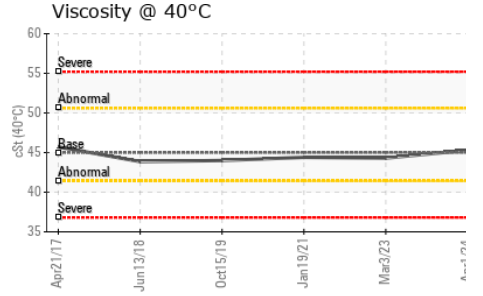
Particle Trend



Acid Number

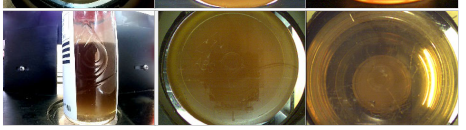


Viscosity @ 40°C



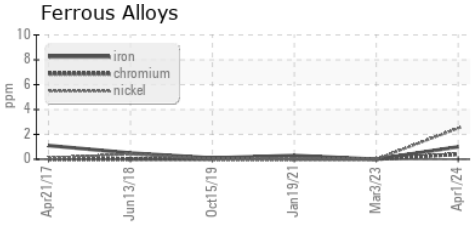
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	LIGHT
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**45.3**	44.3	44.4

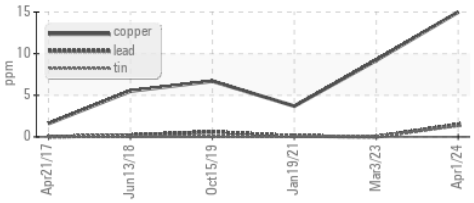
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

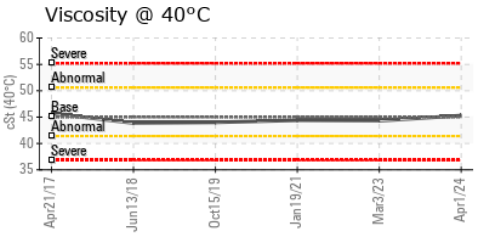
Ferrous Alloys



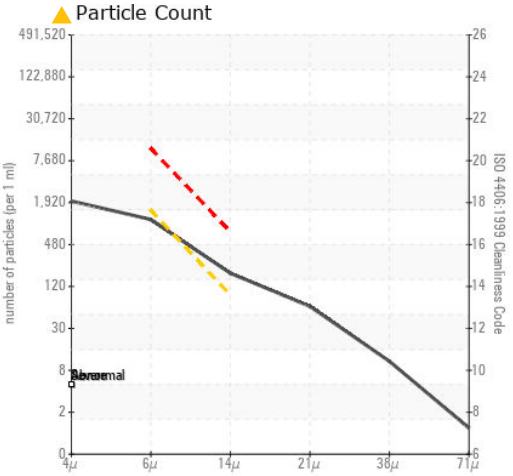
Non-ferrous Metals



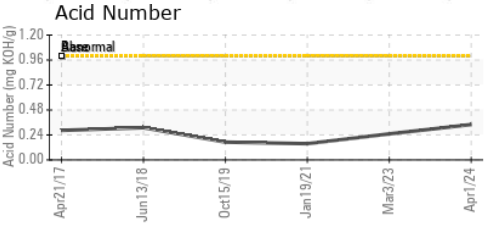
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016852
Lab Number : 06146621
Unique Number : 10976699
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 11 Apr 2024
Tested : 18 Apr 2024
Diagnosed : 18 Apr 2024 - Jonathan Hester

PETER PAN BUS LINES
333 3RD ST
CHELSEA, MA
US 02150
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: