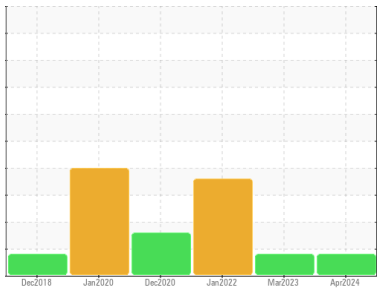
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
KAESER SFC 45 6090067 (S/N 1030)
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- QTS)

DIAGNOSIS

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

▲ Wear
The aluminum level is abnormal. All other component wear rates are normal.

Contamination
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		**KCPA013525**	KCP54510	KCP48673
Sample Date		Client Info		**02 Apr 2024**	04 Mar 2023	26 Jan 2022
Machine Age	hrs	Client Info		**10507**	8620	6334
Oil Age	hrs	Client Info		**3200**	3000	2000
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**1**	2	3
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>3	**0**	<1	<1
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	▲ **22**	▲ 22	▲ 29
Lead	ppm	ASTM D5185m	>10	**0**	0	<1
Copper	ppm	ASTM D5185m	>50	**0**	<1	<1
Tin	ppm	ASTM D5185m	>10	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	3
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**1**	2	4
Calcium	ppm	ASTM D5185m		**0**	0	<1
Phosphorus	ppm	ASTM D5185m	500	**473**	436	387
Zinc	ppm	ASTM D5185m		**241**	168	176
Sulfur	ppm	ASTM D5185m		**2049**	2149	1754

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	<1	<1
Sodium	ppm	ASTM D5185m		**3**	2	5
Potassium	ppm	ASTM D5185m	>20	**3**	2	5
Water	%	ASTM D6304	>0.05	**0.003**	0.016	▲ 0.402
ppm Water	ppm	ASTM D6304	>500	**38**	163.5	▲ 4020

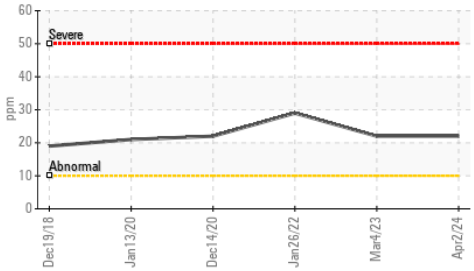
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1517**	1982	---
Particles >6µm		ASTM D7647	>1300	**352**	499	---
Particles >14µm		ASTM D7647	>80	**27**	37	---
Particles >21µm		ASTM D7647	>20	**7**	11	---
Particles >38µm		ASTM D7647	>4	**0**	2	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**18/16/12**	18/16/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	**1.21**	1.014	1.03

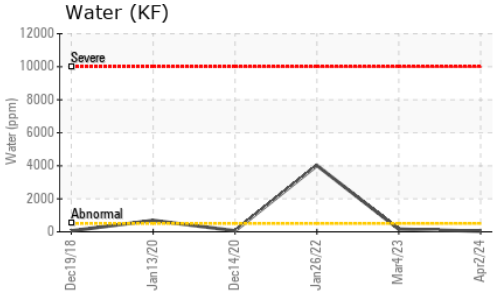
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

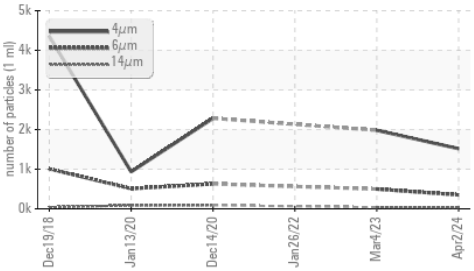
Aluminum (ppm)



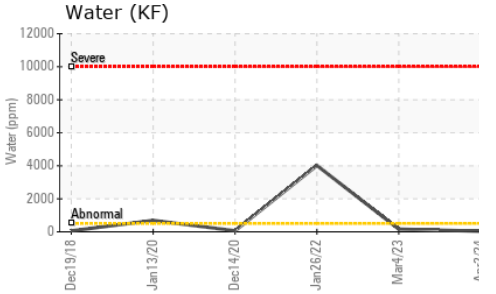
Water (KF)



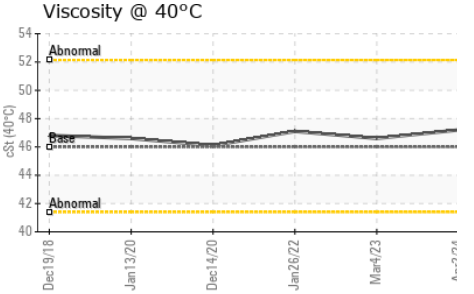
Particle Trend



Water (KF)

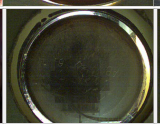


Viscosity @ 40°C



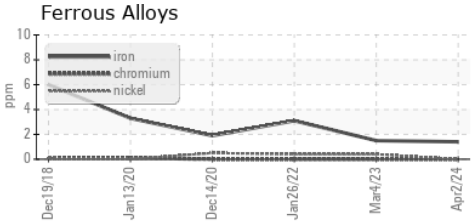
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**47.2**	46.6	47.1

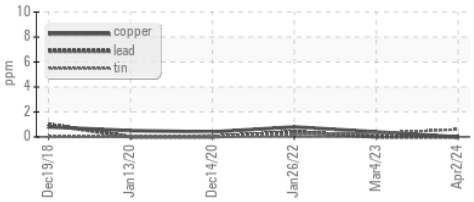
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

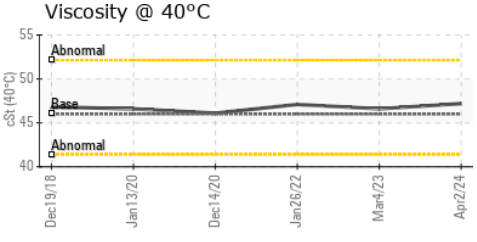
Ferrous Alloys



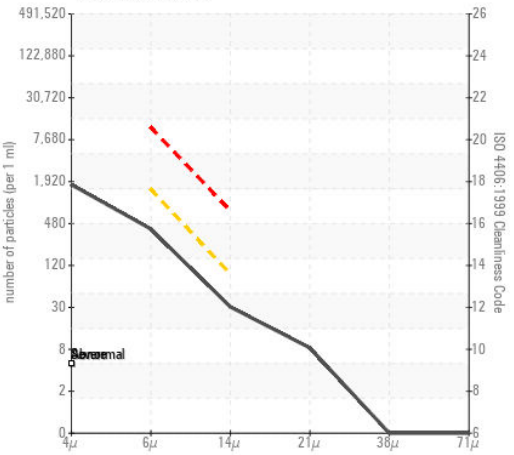
Non-ferrous Metals



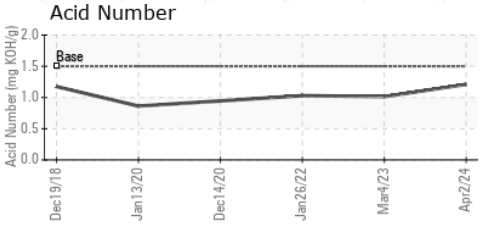
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013525
Lab Number : 06140653
Unique Number : 10965461
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 05 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 09 Apr 2024 - Don Baldridge

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)

THE SPICE HUNTER
184 SUBURBAN RD
SAN LUIS OBISPO, CA
US 93401
Contact: K. KREYENNAGEN
kkreyennagen@sauerbrands.com
T:
F: