KAESER COMPRESSORS
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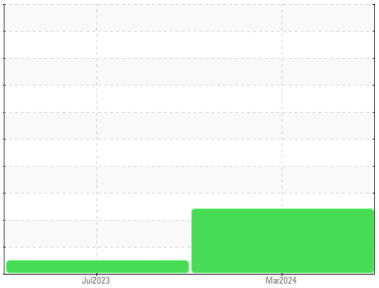
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER 8367786
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. 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 visible silt present in the sample. 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		**KCPA013792**	KCPA004131	---
Sample Date		Client Info		**12 Mar 2024**	18 Jul 2023	---
Machine Age	hrs	Client Info		**5171**	3074	---
Oil Age	hrs	Client Info		**3106**	0	---
Oil Changed		Client Info		**Not Changd**	N/A	---
Sample Status				**ABNORMAL**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	0	---
Chromium	ppm	ASTM D5185m	>10	**0**	0	---
Nickel	ppm	ASTM D5185m	>3	**0**	0	---
Titanium	ppm	ASTM D5185m	>3	**0**	0	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>10	**<1**	<1	---
Lead	ppm	ASTM D5185m	>10	**0**	0	---
Copper	ppm	ASTM D5185m	>50	**3**	7	---
Tin	ppm	ASTM D5185m	>10	**0**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	---
Barium	ppm	ASTM D5185m	90	**0**	0	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	<1	---
Magnesium	ppm	ASTM D5185m	100	**10**	2	---
Calcium	ppm	ASTM D5185m	0	**0**	0	---
Phosphorus	ppm	ASTM D5185m	0	**0**	0	---
Zinc	ppm	ASTM D5185m	0	**0**	0	---
Sulfur	ppm	ASTM D5185m	23500	**21738**	21918	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**1**	0	---
Sodium	ppm	ASTM D5185m		**4**	2	---
Potassium	ppm	ASTM D5185m	>20	**0**	1	---
Water	%	ASTM D6304	>0.05	▲ **0.072**	0.007	---
ppm Water	ppm	ASTM D6304	>500	▲ **720**	71.2	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	279	---
Particles >6µm		ASTM D7647	>1300	**---**	84	---
Particles >14µm		ASTM D7647	>80	**---**	8	---
Particles >21µm		ASTM D7647	>20	**---**	3	---
Particles >38µm		ASTM D7647	>4	**---**	0	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**---**	15/14/10	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.46**	0.41	---

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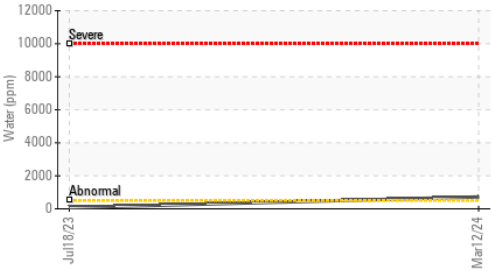
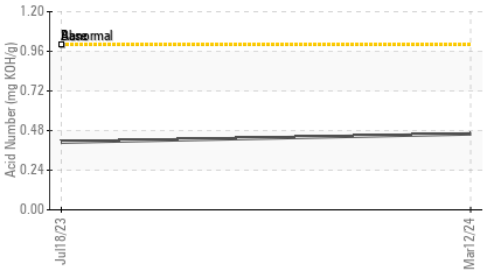
Water (KF)



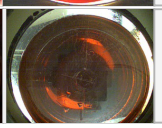
Acid Number



Viscosity @ 40°C

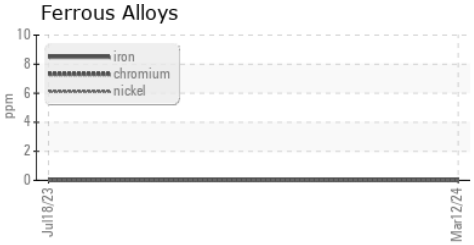
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**48.8**	44.8	---

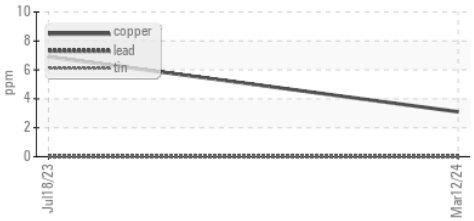
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

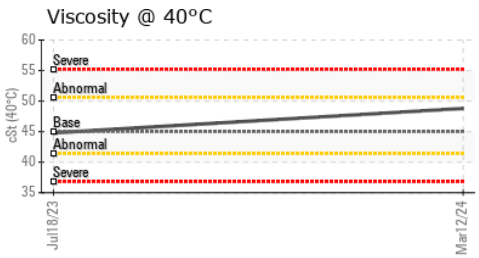
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013792 **Received** : 21 Mar 2024
Lab Number : 06125702 **Tested** : 26 Mar 2024
Unique Number : 10939853 **Diagnosed** : 26 Mar 2024 - Jonathan Hester
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)

HIRSCH VOGEL INC
2230 S 3RD ST
COLUMBUS, OH
US 43207
Contact: Service Manager
T:
F: