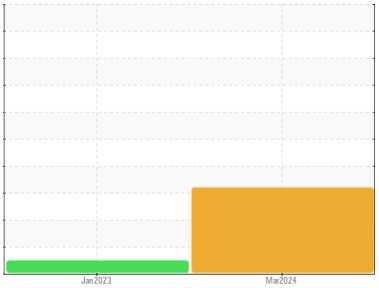
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER 8182213 (S/N 2122)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation
Oil and filter change at the time of sampling has been noted. There is too much water present in this sample to perform a particle count. We recommend an early resample in 500 hours to monitor this condition.

Wear
All component wear rates are normal.

▲ Contamination
There is a light concentration of water present in the oil. Excessive free water present.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KCPA014823**	KCP52698	---
Sample Date		Client Info		**01 Mar 2024**	16 Jan 2023	---
Machine Age	hrs	Client Info		**9807**	3943	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**ABNORMAL**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	1	---
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**	<1	---
Aluminum	ppm	ASTM D5185m	>10	**0**	<1	---
Lead	ppm	ASTM D5185m	>10	**0**	<1	---
Copper	ppm	ASTM D5185m	>50	**9**	3	---
Tin	ppm	ASTM D5185m	>10	**0**	<1	---
Vanadium	ppm	ASTM D5185m		**0**	<1	---
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**	15	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	<1	---
Magnesium	ppm	ASTM D5185m	100	**12**	63	---
Calcium	ppm	ASTM D5185m	0	**<1**	1	---
Phosphorus	ppm	ASTM D5185m	0	**116**	11	---
Zinc	ppm	ASTM D5185m	0	**3**	6	---
Sulfur	ppm	ASTM D5185m	23500	**15811**	17183	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**2**	<1	---
Sodium	ppm	ASTM D5185m		**3**	15	---
Potassium	ppm	ASTM D5185m	>20	**0**	1	---
Water	%	ASTM D6304	>0.05	▲ **0.196**	0.017	---
ppm Water	ppm	ASTM D6304	>500	▲ **1960**	177.9	---

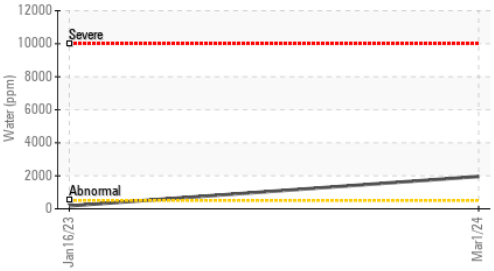
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	3082	---
Particles >6µm		ASTM D7647	>1300	**---**	1069	---
Particles >14µm		ASTM D7647	>80	**---**	63	---
Particles >21µm		ASTM D7647	>20	**---**	10	---
Particles >38µm		ASTM D7647	>4	**---**	1	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**---**	19/17/13	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.28**	0.33	---

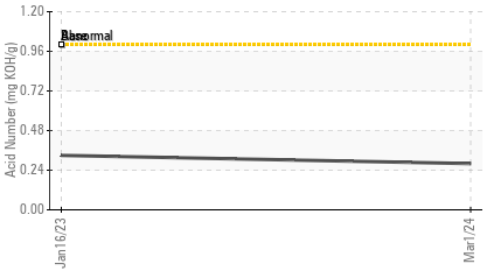
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

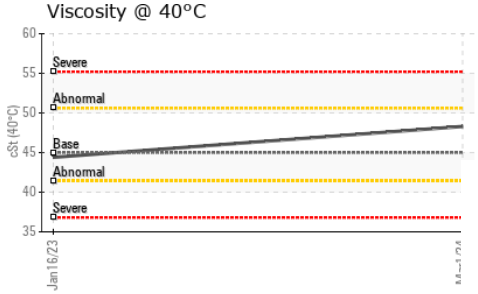
Water (KF)



Acid Number

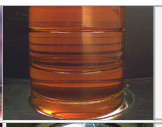
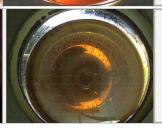


Viscosity @ 40°C



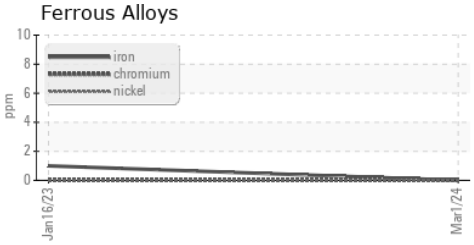
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	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		● **>10%**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**48.3**	44.4	---

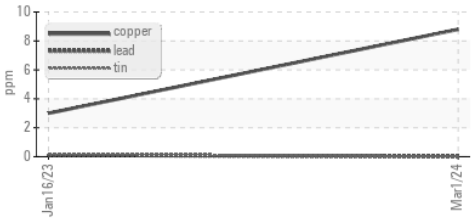
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

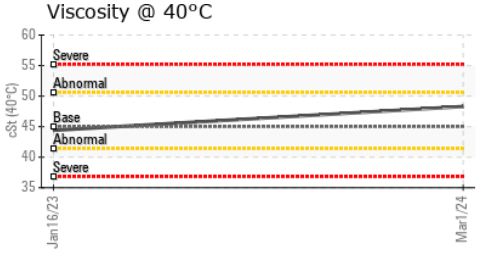
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA014823
Lab Number : 06124299
Unique Number : 10938450
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 20 Mar 2024
Tested : 23 Mar 2024
Diagnosed : 23 Mar 2024 - Don Baldridge

Certificate L2367

TESLA INC
3520 WADLEY PL, BLDG C
AUSTIN, TX
US 78728
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: