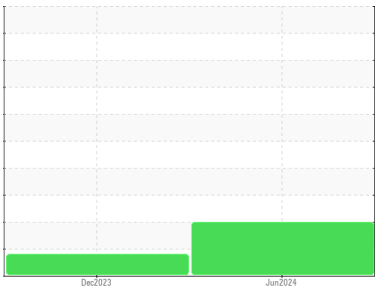
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
KAESER BSD 50 8515237 (S/N 1378)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-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
Moderate concentration of visible dirt/debris 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KC121632**	KC124971	---
Sample Date		Client Info		**12 Jun 2024**	11 Dec 2023	---
Machine Age	hrs	Client Info		**1388**	1187	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ATTENTION	---

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m	90	**26**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	0	---
Manganese	ppm	ASTM D5185m		**<1**	0	---
Magnesium	ppm	ASTM D5185m	90	**20**	59	---
Calcium	ppm	ASTM D5185m	2	**0**	2	---
Phosphorus	ppm	ASTM D5185m		**2**	16	---
Zinc	ppm	ASTM D5185m		**16**	11	---

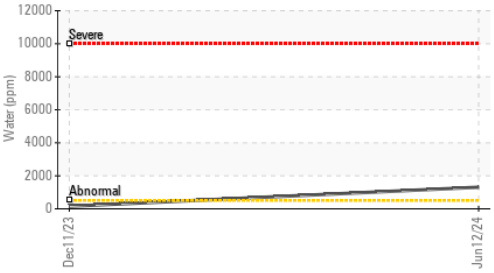
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	0	---
Sodium	ppm	ASTM D5185m		**4**	11	---
Potassium	ppm	ASTM D5185m	>20	**2**	15	---
Water	%	ASTM D6304	>0.05	▲ **0.131**	0.015	---
ppm Water	ppm	ASTM D6304	>500	▲ **1310**	153	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	4515	---
Particles >6µm		ASTM D7647	>1300	**---**	813	---
Particles >14µm		ASTM D7647	>80	**---**	84	---
Particles >21µm		ASTM D7647	>20	**---**	28	---
Particles >38µm		ASTM D7647	>4	**---**	2	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**---**	19/17/14	---

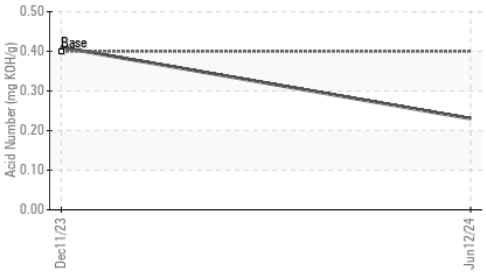
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.23**	0.41	---

OIL ANALYSIS REPORT

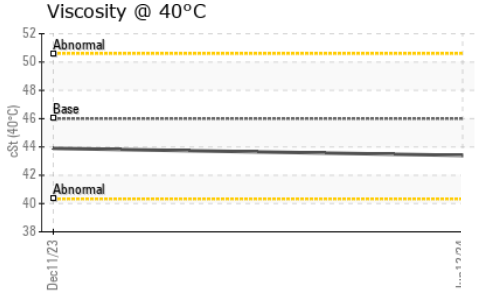
Water (KF)



Acid Number



Viscosity @ 40°C



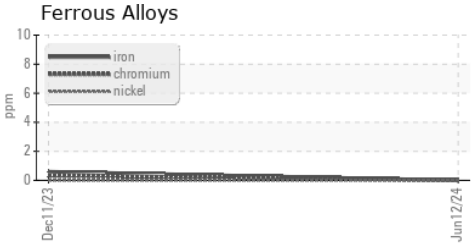
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Sand/Dirt	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	46	**43.4**	43.9	---

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

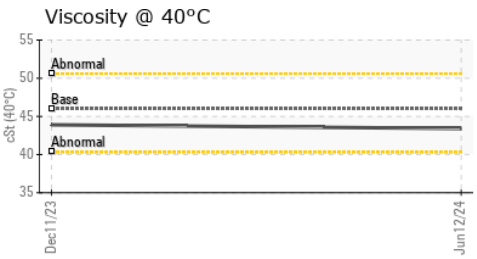
GRAPHS

Ferrous Alloys

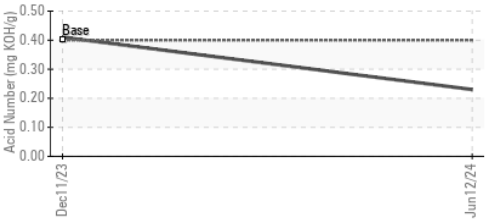


Non-ferrous Metals

Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC121632
Lab Number : 06212395
Unique Number : 11085259
Test Package : IND 2

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Don Baldridge

MAC STEEL
11501 READING RD
CINCINNATI, OH
US 45241
Contact: SERVICE MANAGER
T:
F:

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)