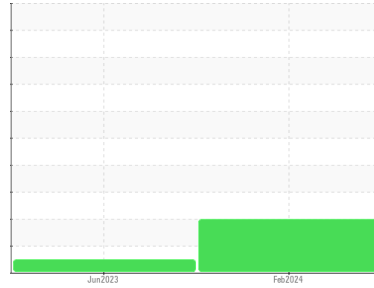




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 7630824

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

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates 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			KCPA015882	KCPA005767	---
Sample Date	Client Info			22 Feb 2024	26 Jun 2023	---
Machine Age	hrs	Client Info		15295	12077	---
Oil Age	hrs	Client Info		3000	0	---
Oil Changed	Client Info			Changed	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m	>3	0	<1	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	0	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>50	5	15	---
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	13	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	100	63	4	---
Calcium	ppm	ASTM D5185m	0	<1	0	---
Phosphorus	ppm	ASTM D5185m	0	23	0	---
Zinc	ppm	ASTM D5185m	0	11	2	---
Sulfur	ppm	ASTM D5185m	23500	18903	17521	---

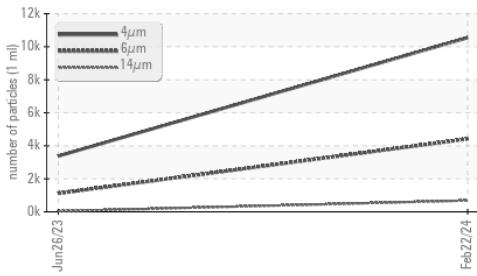
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	---
Sodium	ppm	ASTM D5185m		8	0	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Water	%	ASTM D6304	>0.05	0.014	0.005	---
ppm Water	ppm	ASTM D6304	>500	147	57.9	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		10552	3378	---
Particles >6µm		ASTM D7647	>1300	▲ 4413	1114	---
Particles >14µm		ASTM D7647	>80	▲ 683	32	---
Particles >21µm		ASTM D7647	>20	▲ 213	7	---
Particles >38µm		ASTM D7647	>4	▲ 8	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/19/17	19/17/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39	0.32	---

OIL ANALYSIS REPORT

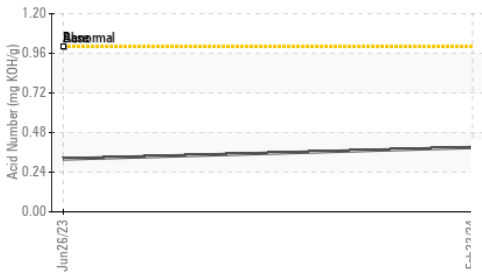
▲ Particle Trend



Water (KF)



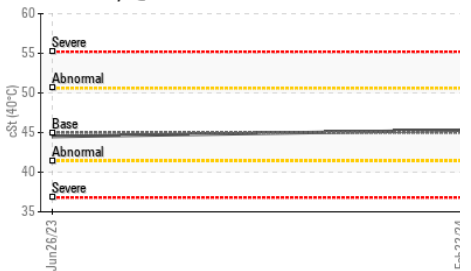
Acid Number



Water (KF)



Viscosity @ 40°C

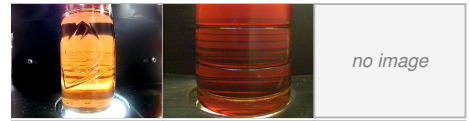


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

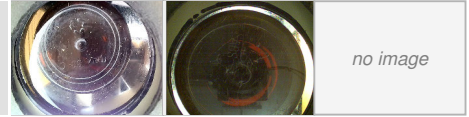
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	45.3	44.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

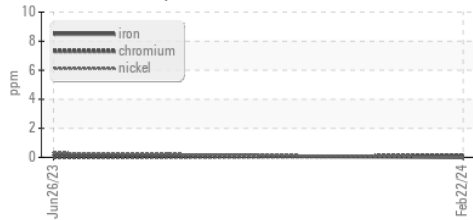


Bottom

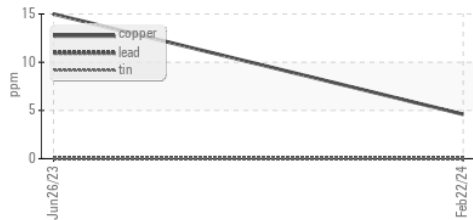


GRAPHS

Ferrous Alloys



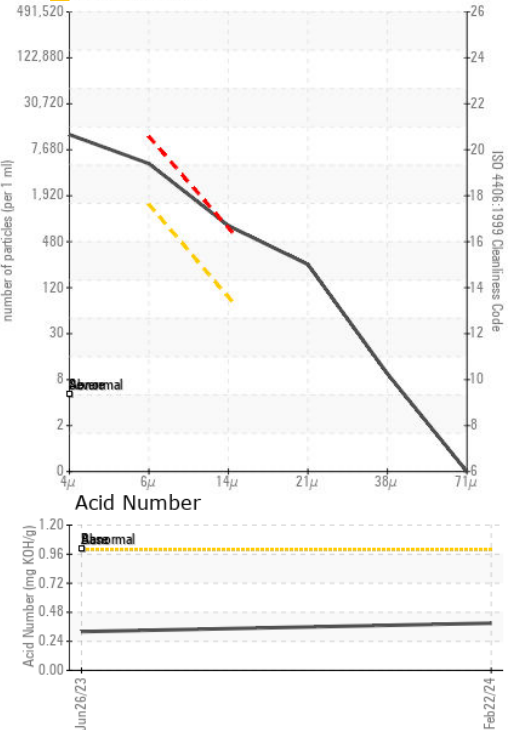
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015882
Lab Number : 06100969
Unique Number : 10899199
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 26 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Jonathan Hester

CARMAX 07197
 10510 CADILLAC ST
 PINEVILLE, NC
 US 28134
 Contact: WENDY SITKO

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: