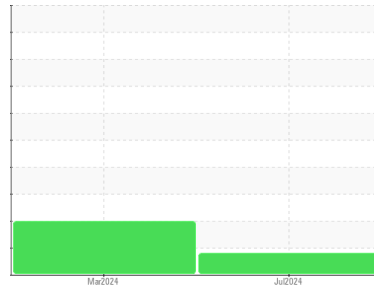




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
KAESER CSD 100 9116564 (S/N 1291)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

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	KC107749	KC122125	---
Sample Date	Client Info	03 Jul 2024	20 Mar 2024	---
Machine Age	hrs	Client Info	4417	3203
Oil Age	hrs	Client Info	4417	0
Oil Changed	Client Info	Changed	N/A	---
Sample Status		ABNORMAL	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	3	3
Chromium	ppm	ASTM D5185m >10	0	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	▲ 21	▲ 12
Lead	ppm	ASTM D5185m >10	0	0
Copper	ppm	ASTM D5185m >50	2	2
Tin	ppm	ASTM D5185m >10	0	<1
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
Barium	ppm	ASTM D5185m 90	<1	10
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	0	1
Magnesium	ppm	ASTM D5185m 90	2	16
Calcium	ppm	ASTM D5185m 2	0	<1
Phosphorus	ppm	ASTM D5185m	38	39
Zinc	ppm	ASTM D5185m	0	0

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1
Sodium	ppm	ASTM D5185m	8	6
Potassium	ppm	ASTM D5185m >20	10	10
Water	%	ASTM D6304 >0.05	0.006	0.005
ppm Water	ppm	ASTM D6304 >500	64	56

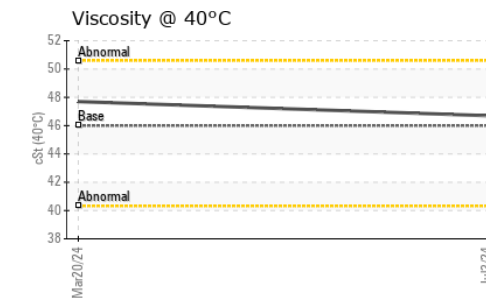
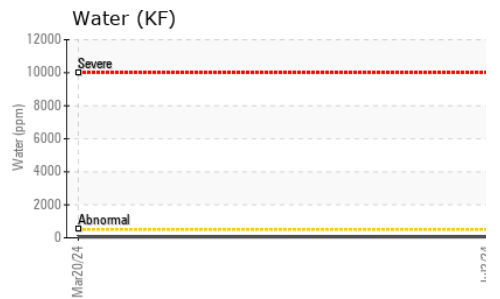
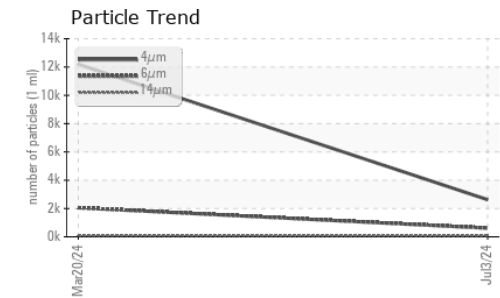
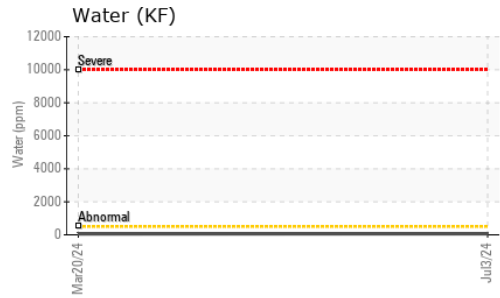
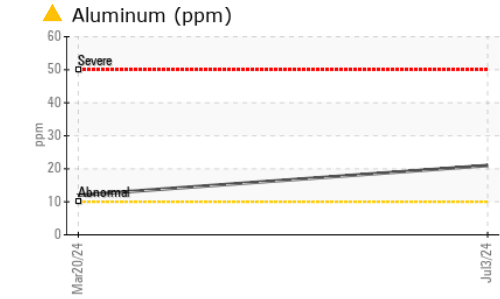
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	2624	12190	---
Particles >6µm	ASTM D7647 >1300	615	● 2053	---
Particles >14µm	ASTM D7647 >80	78	● 85	---
Particles >21µm	ASTM D7647 >20	27	19	---
Particles >38µm	ASTM D7647 >4	1	1	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	19/16/13	● 21/18/14	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.36	0.38

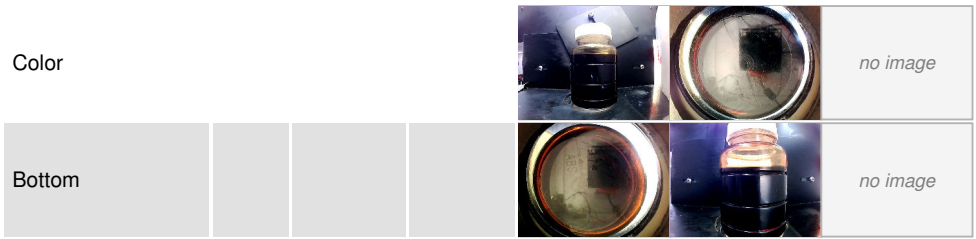
OIL ANALYSIS REPORT



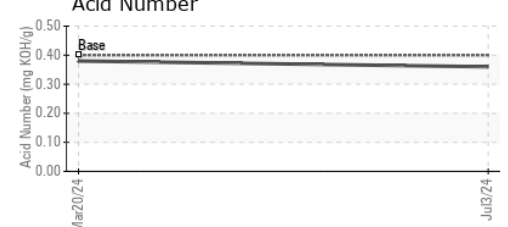
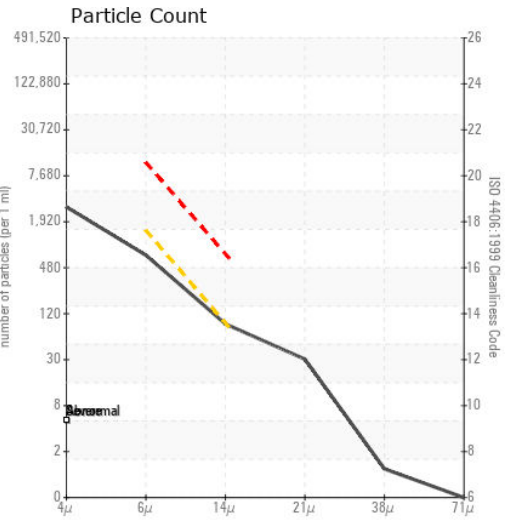
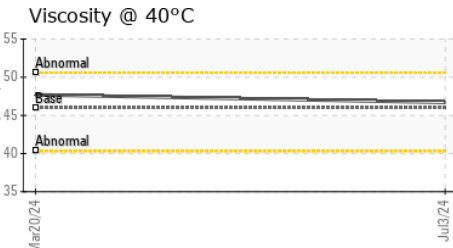
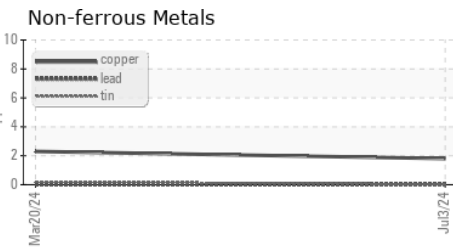
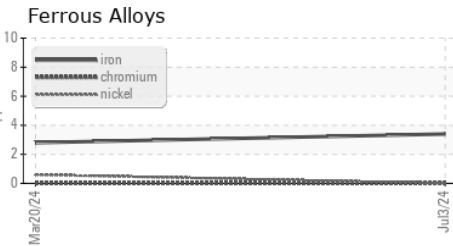
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 46	46.7	47.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC107749
Lab Number : 06236813
Unique Number : 11125647
Test Package : IND 2

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Don Baldrige

MELITTA USA
 13925 58TH ST.
 CLEARWATER, FL
 US 33760
 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)