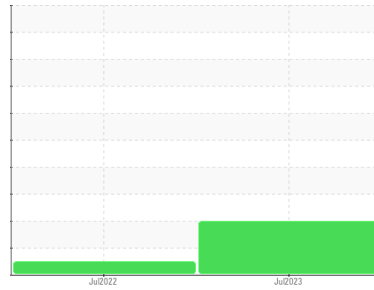




PROBLEM SUMMARY

Sample Rating Trend



ISO



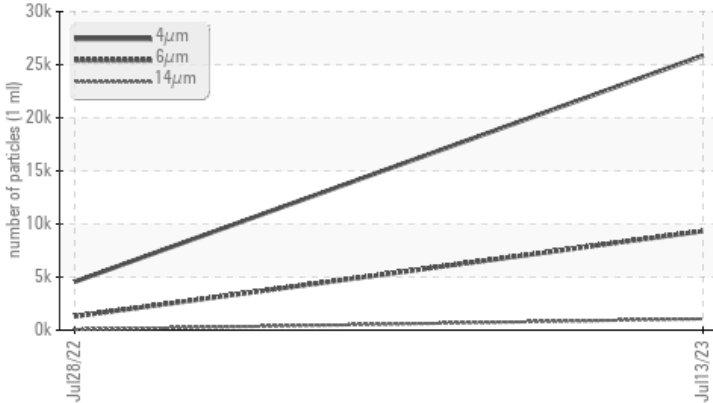
Machine Id
8024330 (S/N 1819)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ 9337	1294	---
Particles >14µm	ASTM D7647	>80	▲ 1067	59	---
Particles >21µm	ASTM D7647	>20	▲ 313	9	---
Particles >38µm	ASTM D7647	>4	▲ 11	1	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 22/20/17	19/17/13	---

Customer Id: WARMCC
Sample No.: KC109124
Lab Number: 05903779
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

28 Jul 2022 Diag: Jonathan Hester

NORMAL



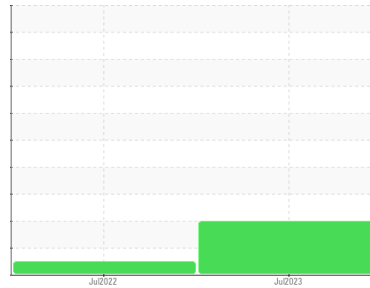
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
8024330 (S/N 1819)

Component

Compressor

Fluid

KAESER SIGMA (OEM) S-460 (--- QTS)

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			KC109124	KC102454	---
Sample Date	Client Info			13 Jul 2023	28 Jul 2022	---
Machine Age	hrs	Client Info		3219	1756	---
Oil Age	hrs	Client Info		1463	1756	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<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	0	---
Aluminum	ppm	ASTM D5185m	>10	<1	<1	---
Lead	ppm	ASTM D5185m	>10	0	<1	---
Copper	ppm	ASTM D5185m	>50	2	2	---
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	2	---
Barium	ppm	ASTM D5185m	90	22	24	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	90	70	72	---
Calcium	ppm	ASTM D5185m	2	2	4	---
Phosphorus	ppm	ASTM D5185m		4	3	---
Zinc	ppm	ASTM D5185m		0	5	---

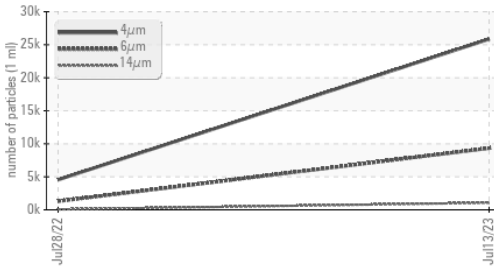
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Sodium	ppm	ASTM D5185m		28	22	---
Potassium	ppm	ASTM D5185m	>20	4	2	---
Water	%	ASTM D6304	>0.05	0.028	0.027	---
ppm Water	ppm	ASTM D6304	>500	285.8	279.9	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		25862	4556	---
Particles >6µm		ASTM D7647	>1300	▲ 9337	1294	---
Particles >14µm		ASTM D7647	>80	▲ 1067	59	---
Particles >21µm		ASTM D7647	>20	▲ 313	9	---
Particles >38µm		ASTM D7647	>4	▲ 11	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 22/20/17	19/17/13	---

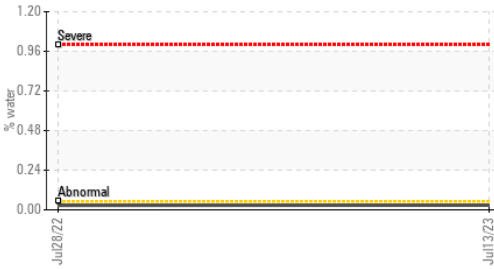
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.32	0.36	---

OIL ANALYSIS REPORT

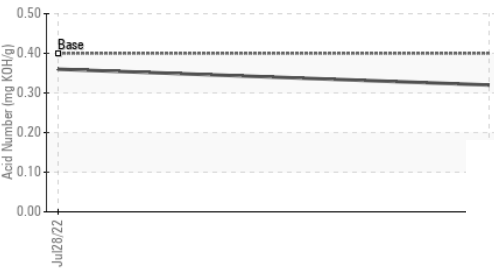
▲ Particle Trend



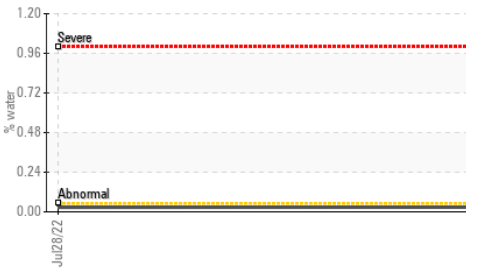
Water



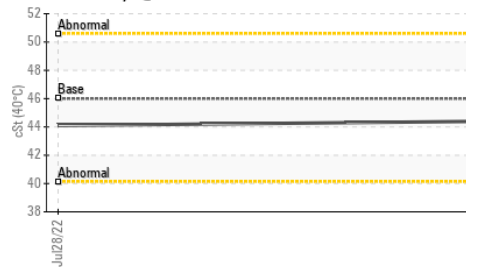
Acid Number



Water



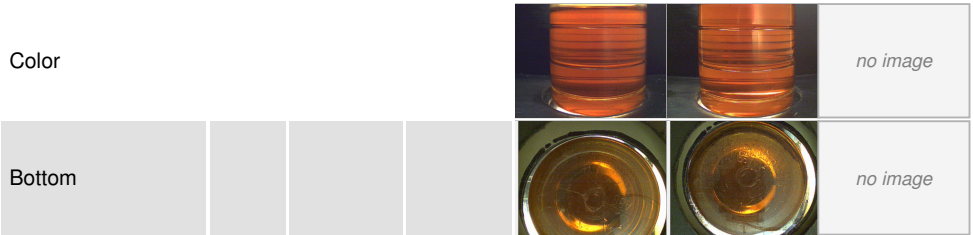
Viscosity @ 40°C



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	---

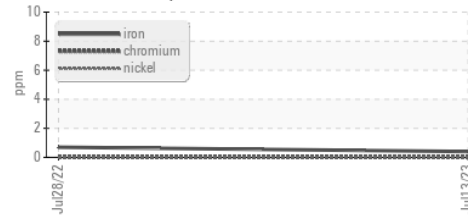
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.4	44.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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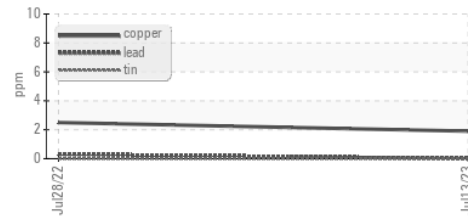


GRAPHS

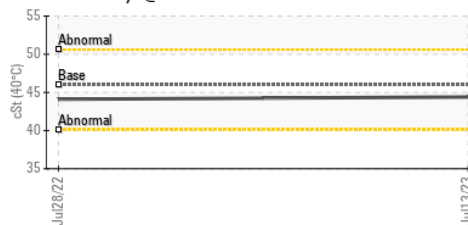
Ferrous Alloys



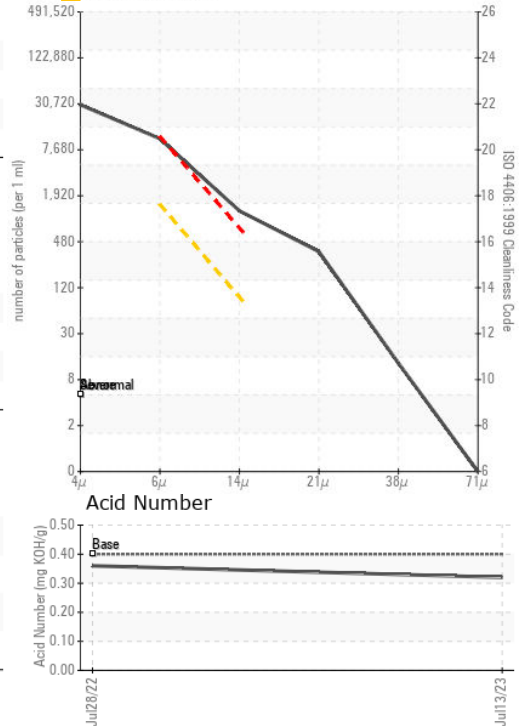
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC109124 **Received** : 20 Jul 2023
Lab Number : 05903779 **Diagnosed** : 24 Jul 2023
Unique Number : 10565135 **Diagnostician** : Angela Borella
Test Package : IND 2

WARING PRODUCTS
 1 CRYSTAL DR
 MCCONNELLSBURG, PA
 US 17233
 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: