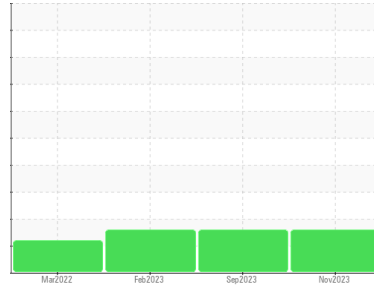




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 7919042

Component
Compressor

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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			KC121109	KC124464	KC105638
Sample Date	Client Info			15 Nov 2023	13 Sep 2023	07 Feb 2023
Machine Age	hrs	Client Info		12472	11275	1243
Oil Age	hrs	Client Info		0	0	1243
Oil Changed	Client Info			N/A	N/A	Not Changd
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	3	0	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	11	12	8
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	0	40
Molybdenum	ppm	ASTM D5185m		3	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	90	23	<1	57
Calcium	ppm	ASTM D5185m	2	<1	0	1
Phosphorus	ppm	ASTM D5185m		0	0	0
Zinc	ppm	ASTM D5185m		27	12	17

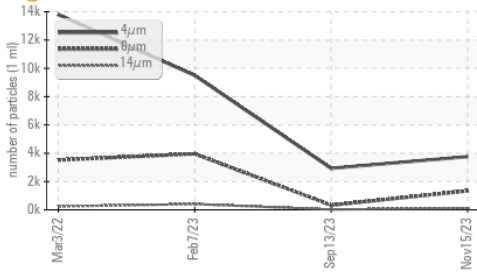
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	0
Sodium	ppm	ASTM D5185m		21	17	26
Potassium	ppm	ASTM D5185m	>20	0	5	2
Water	%	ASTM D6304	>0.05	0.008	▲ 0.125	0.018
ppm Water	ppm	ASTM D6304	>500	85	▲ 1250	185.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		3759	2932	9497
Particles >6µm		ASTM D7647	>1300	● 1343	325	▲ 3955
Particles >14µm		ASTM D7647	>80	● 106	17	▲ 403
Particles >21µm		ASTM D7647	>20	● 25	5	▲ 70
Particles >38µm		ASTM D7647	>4	1	0	4
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● 19/18/14	19/16/11	▲ 20/19/16

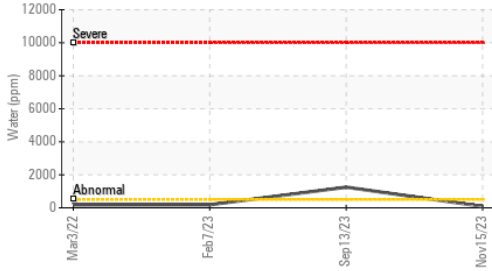
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.26	0.25	0.27

OIL ANALYSIS REPORT

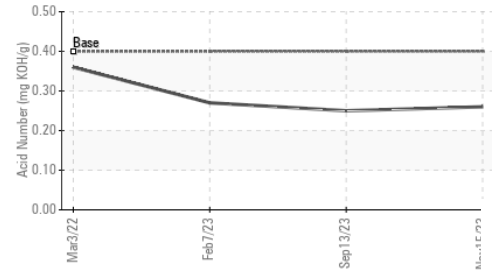
Particle Trend



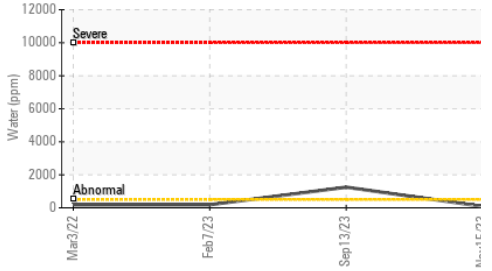
Water (KF)



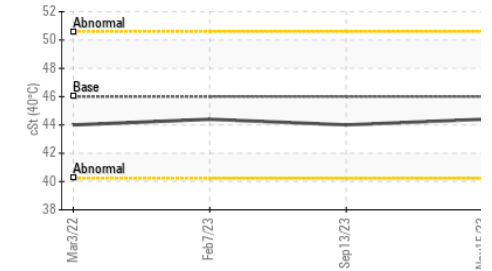
Acid Number



Water (KF)



Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	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	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

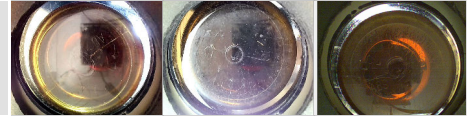
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.4	44.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

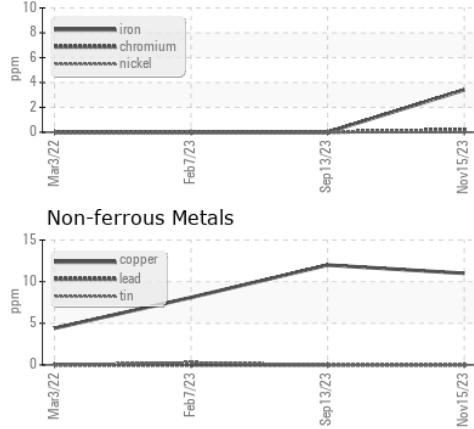


Bottom

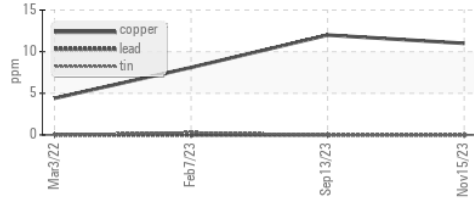


GRAPHS

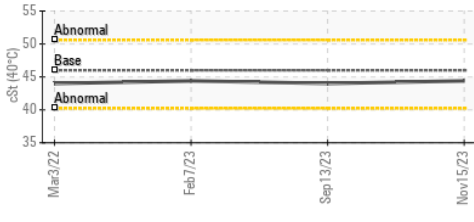
Ferrous Alloys



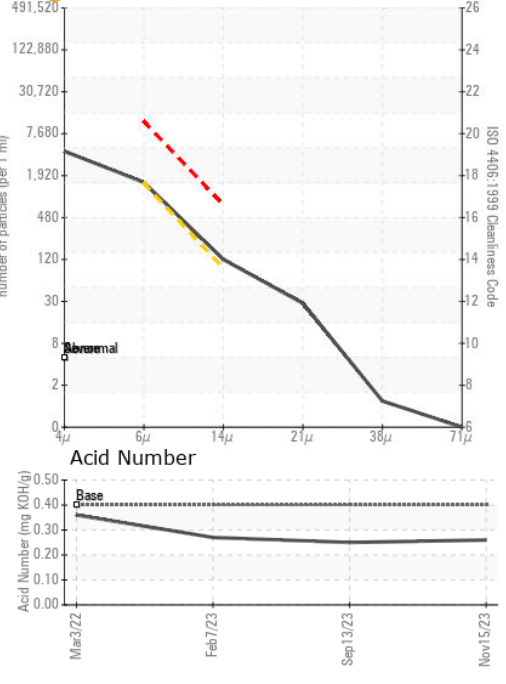
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KC121109
 Lab Number : **06123185**
 Unique Number : 10937336
 Test Package : IND 2
 Received : 19 Mar 2024
 Tested : 20 Mar 2024
 Diagnosed : 21 Mar 2024 - Don Baldrige

NATIONAL EXPOSURE TESTING
 3211 CENTENNIAL RD
 SYLVANIA, OH
 US 43560
 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: