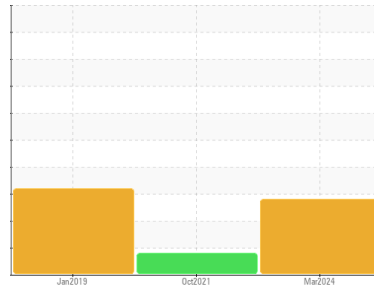




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SM 11 2175784 (S/N 1723)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. We were unable to perform a particle count due to a high concentration of particles and water present in this sample.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. There is a light concentration of water present in the oil. Light concentration of visible dirt/debris 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		KCPA015982	KCP05379711	KCP00877
Sample Date	Client Info		27 Mar 2024	12 Oct 2021	24 Jan 2019
Machine Age	hrs	Client Info	43567	41449	40398
Oil Age	hrs	Client Info	0	1051	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	4	2	2
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	<1
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	<1
Aluminum	ppm	ASTM D5185m >10	2	0	0
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	21	7	6
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1
Barium	ppm	ASTM D5185m 90	<1	0	1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	1	<1
Magnesium	ppm	ASTM D5185m 90	2	23	40
Calcium	ppm	ASTM D5185m 2	4	0	<1
Phosphorus	ppm	ASTM D5185m	0	4	<1
Zinc	ppm	ASTM D5185m	16	42	9
Sulfur	ppm	ASTM D5185m	19790	16958	22205

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	14	▲ 49
Sodium	ppm	ASTM D5185m	0	7	8
Potassium	ppm	ASTM D5185m >20	1	0	<1
Water	%	ASTM D6304 >0.05	▲ 0.289	0.013	0.012
ppm Water	ppm	ASTM D6304 >500	▲ 2890	133.7	120

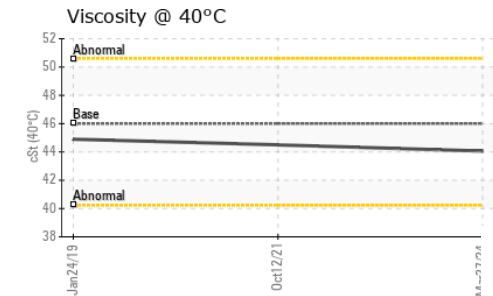
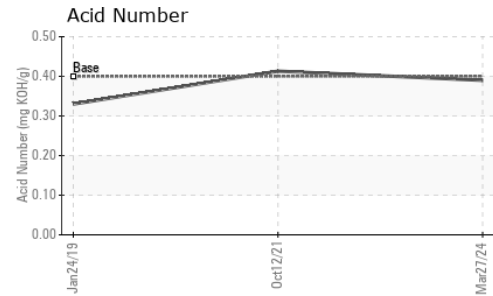
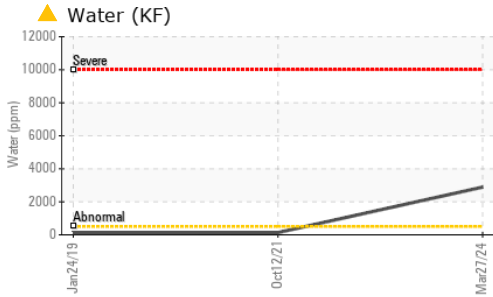
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	5088	64230
Particles >6µm	ASTM D7647 >1300		---	1163	▲ 11323
Particles >14µm	ASTM D7647 >80		---	● 89	▲ 355
Particles >21µm	ASTM D7647 >20		---	● 22	▲ 159
Particles >38µm	ASTM D7647 >4		---	2	▲ 22
Particles >71µm	ASTM D7647 >3		---	0	1
Oil Cleanliness	ISO 4406 (c) >--/17/13		---	● 17/14	▲ 21/16

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.39	0.413	0.330

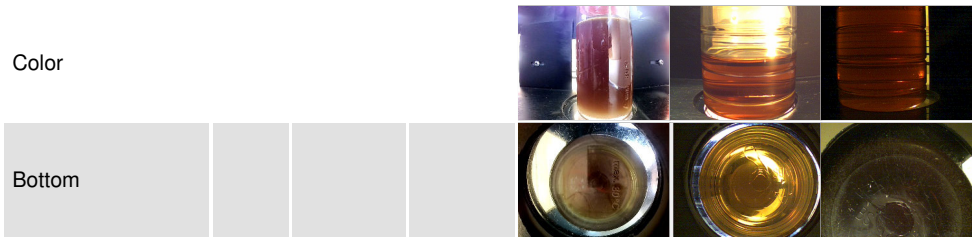
OIL ANALYSIS REPORT



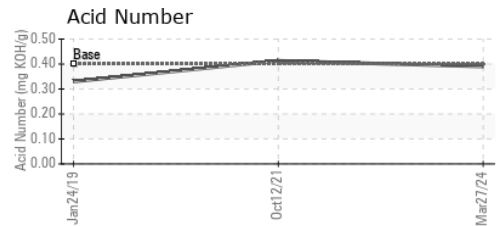
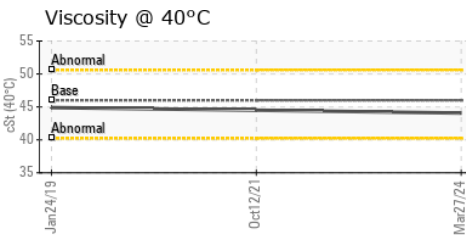
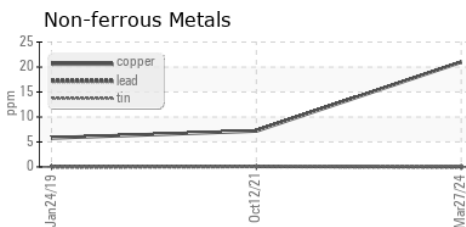
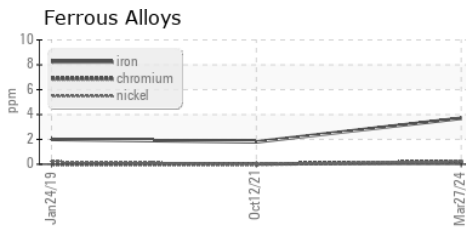
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ LIGHT	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	● HAZY	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	44.06	44.5	44.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015982 **Received** : 08 Apr 2024
Lab Number : 06142236 **Tested** : 12 Apr 2024
Unique Number : 10967044 **Diagnosed** : 12 Apr 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

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