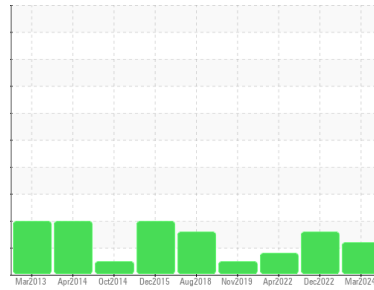




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
KAESER ASD 40 4445649 (S/N 1092)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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			KCPA015509	KCP47098	KCP43668
Sample Date	Client Info			25 Mar 2024	12 Dec 2022	01 Apr 2022
Machine Age	hrs	Client Info		61131	54480	50989
Oil Age	hrs	Client Info		6568	3491	3718
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	▲ 96	15	11
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

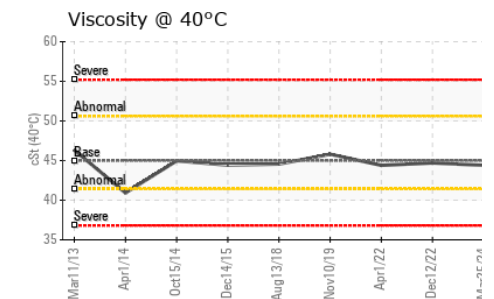
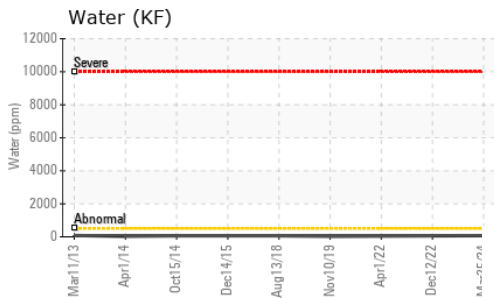
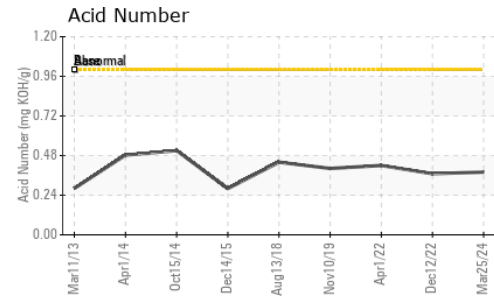
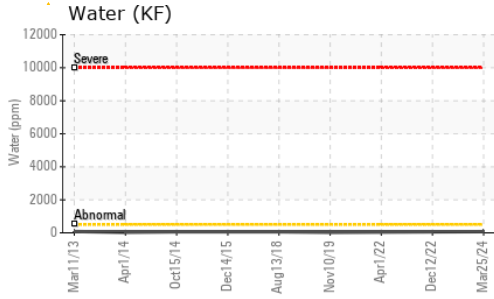
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	<1	0	8
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	100	<1	5	30
Calcium	ppm	ASTM D5185m	0	4	0	0
Phosphorus	ppm	ASTM D5185m	0	1	4	6
Zinc	ppm	ASTM D5185m	0	<1	21	67
Sulfur	ppm	ASTM D5185m	23500	11571	19807	15604

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	1	<1
Sodium	ppm	ASTM D5185m		0	2	10
Potassium	ppm	ASTM D5185m	>20	1	0	2
Water	%	ASTM D6304	>0.05	0.007	0.005	0.004
ppm Water	ppm	ASTM D6304	>500	72	58.9	42.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	9302	3840
Particles >6µm		ASTM D7647	>1300	---	▲ 2967	1067
Particles >14µm		ASTM D7647	>80	---	▲ 226	● 84
Particles >21µm		ASTM D7647	>20	---	▲ 41	● 22
Particles >38µm		ASTM D7647	>4	---	2	0
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 20/19/15	● 17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	0.37	0.42

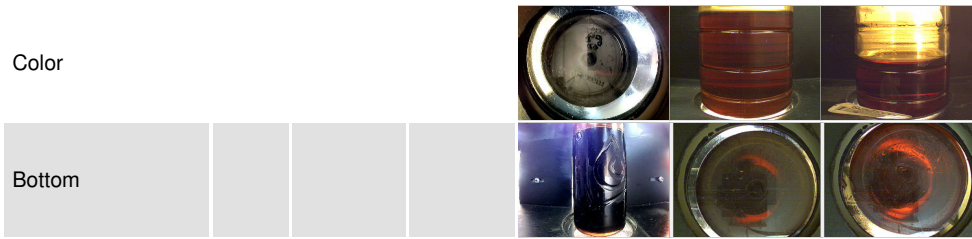
OIL ANALYSIS REPORT



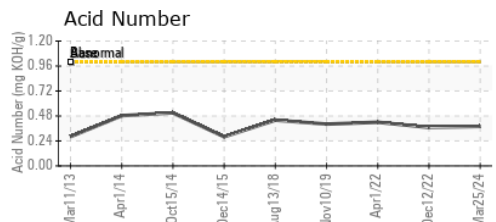
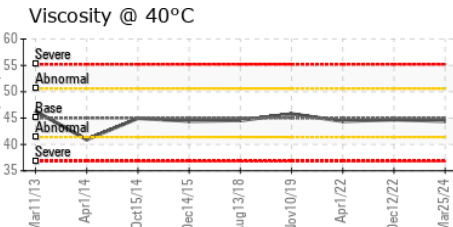
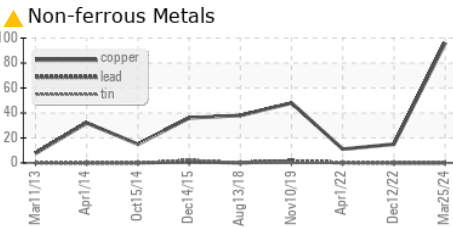
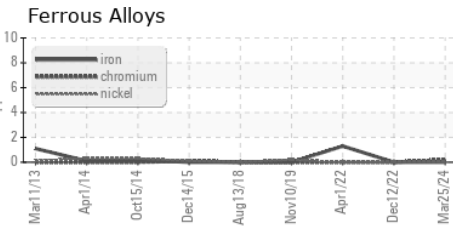
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	44.4	44.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015509 **Received** : 08 Apr 2024
Lab Number : 06142237 **Tested** : 11 Apr 2024
Unique Number : 10967045 **Diagnosed** : 11 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SERVICE UNIFORM
 2580 S RARITAN ST
 ENGLEWOOD, CO
 US 80110
 Contact:

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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F: