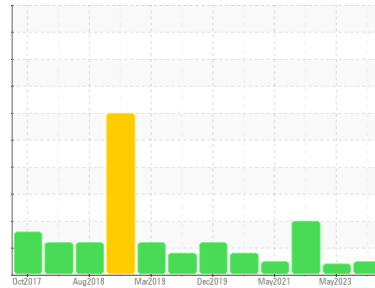


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER SM15 5887748 (S/N 1511)

Component
Compressor

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. We were unable to perform a particle count due to insufficient sample.

Wear

All component wear rates are normal.

Contamination

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		KC108899	KC107824	KC53629
Sample Date	Client Info		12 Sep 2023	23 May 2023	19 May 2022
Machine Age	hrs	Client Info	55481	52940	44096
Oil Age	hrs	Client Info	2541	8844	0
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	11	27	11
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	---	---	---
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	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 90	30	2	<1
Calcium	ppm	ASTM D5185m 2	0	<1	0
Phosphorus	ppm	ASTM D5185m	0	1	4
Zinc	ppm	ASTM D5185m	8	2	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	1
Sodium	ppm	ASTM D5185m	4	<1	0
Potassium	ppm	ASTM D5185m >20	4	<1	<1
Water	%	ASTM D6304 >0.05	0.014	0.003	0.004
ppm Water	ppm	ASTM D6304 >500	144.5	25.3	48.3

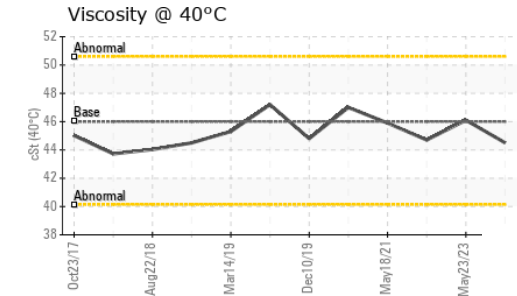
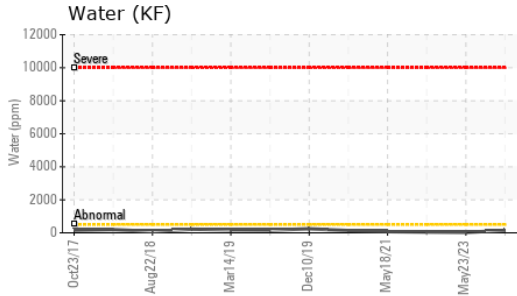
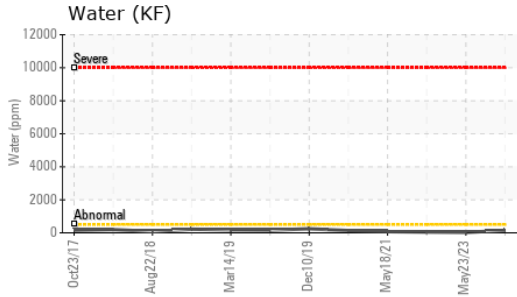
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	---	13466
Particles >6µm	ASTM D7647	>1300	---	---	▲ 6373
Particles >14µm	ASTM D7647	>80	---	---	▲ 1051
Particles >21µm	ASTM D7647	>20	---	---	▲ 241
Particles >38µm	ASTM D7647	>4	---	---	▲ 14
Particles >71µm	ASTM D7647	>3	---	---	▲ 1
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	---	▲ 21/20/17

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.365	0.31	0.35

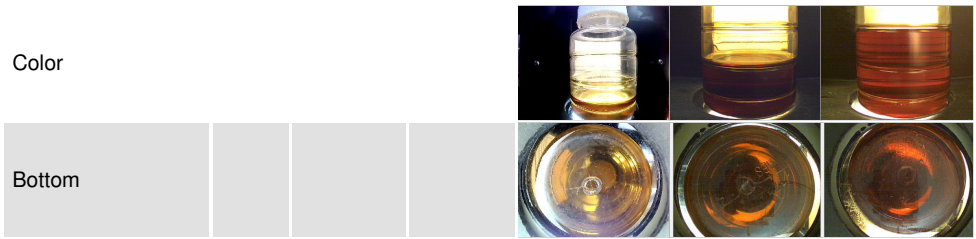
OIL ANALYSIS REPORT



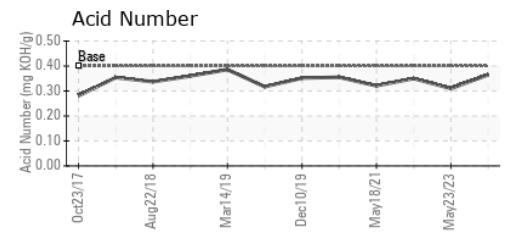
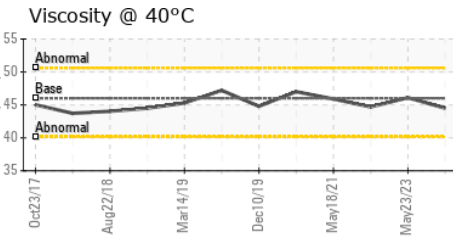
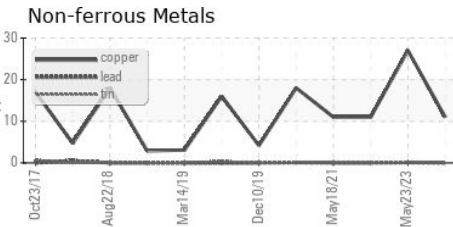
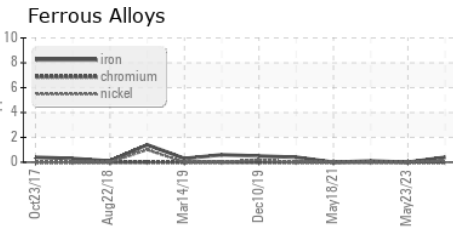
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.5	46.1	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. : KC108899 **Received** : 02 Oct 2023
Lab Number : 05966333 **Diagnosed** : 04 Oct 2023
Unique Number : 10672884 **Diagnostician** : Jonathan Hester
Test Package : IND 2

FED CHEM
 275 KEYSTONE DR
 BETHLEHEM, PA
 US 18020
 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)

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