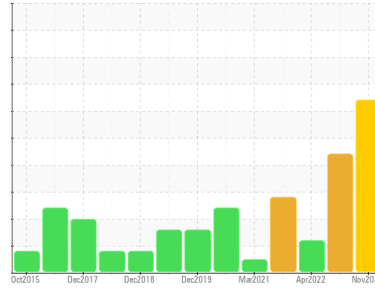




PROBLEM SUMMARY

Sample Rating Trend



WATER



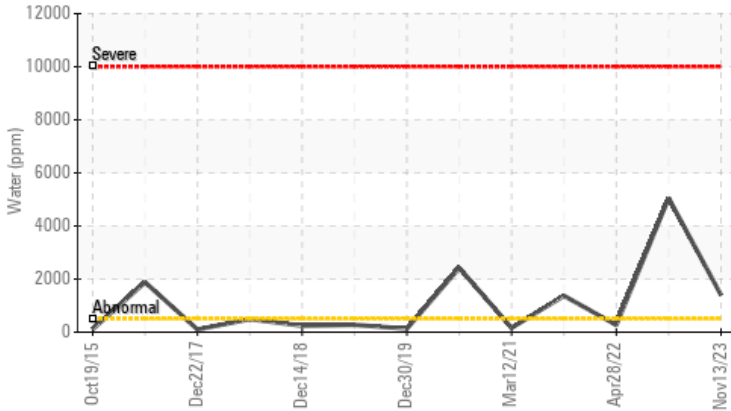
Machine Id
KAESER SX 7.5 3867521 (S/N 1036)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ATTENTION
Water	%	ASTM D6304	>0.05	▲ 0.140	▲ 0.505	0.026
ppm Water	ppm	ASTM D6304	>500	▲ 1400	▲ 5050	268.6
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	▲ 0.2%	NEG
Free Water	scalar	*Visual		● >10%	▲ >10%	NEG

Customer Id: GROSOUKC
Sample No.: KCPA011290
Lab Number: 06013344
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

12 Dec 2022 Diag: Don Baldrige

WATER



We recommend you service the filters on this component. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate concentration of water present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report



28 Apr 2022 Diag: Don Baldrige

ISO



Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



11 Sep 2021 Diag: Don Baldrige

WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. The 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 present in this sample. All component wear rates are normal. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

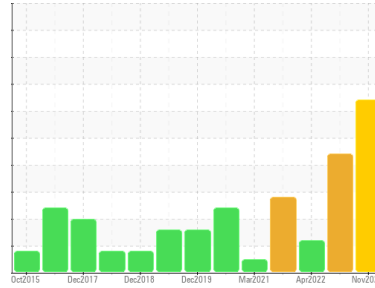
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SX 7.5 3867521 (S/N 1036)

Component
Compressor

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

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Excessive free water present. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

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		KCPA011290	KCP55713	KCP45521
Sample Date	Client Info		13 Nov 2023	12 Dec 2022	28 Apr 2022
Machine Age	hrs	Client Info	16472	14530	13552
Oil Age	hrs	Client Info	0	1000	3000
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			SEVERE	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	<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	<1	<1
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	8	13	4
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	1
Barium	ppm	ASTM D5185m 90	1	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 100	27	12	40
Calcium	ppm	ASTM D5185m 0	3	3	<1
Phosphorus	ppm	ASTM D5185m 0	2	2	8
Zinc	ppm	ASTM D5185m 0	26	45	38
Sulfur	ppm	ASTM D5185m 23500	18377	21944	17379

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	1
Sodium	ppm	ASTM D5185m	1	0	12
Potassium	ppm	ASTM D5185m >20	0	<1	1
Water	%	ASTM D6304 >0.05	▲ 0.140	▲ 0.505	0.026
ppm Water	ppm	ASTM D6304 >500	▲ 1400	▲ 5050	268.6

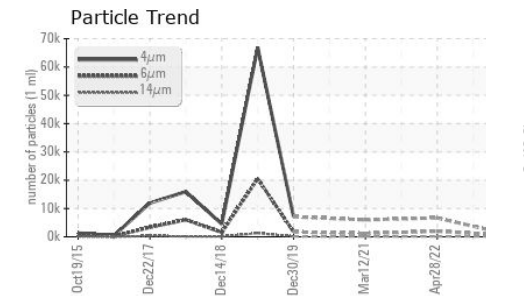
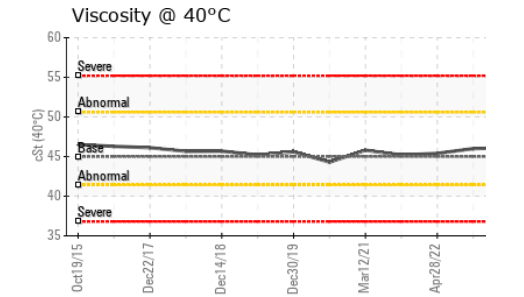
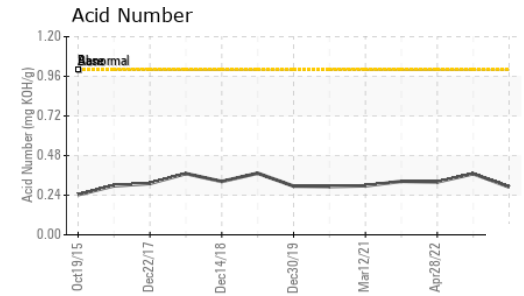
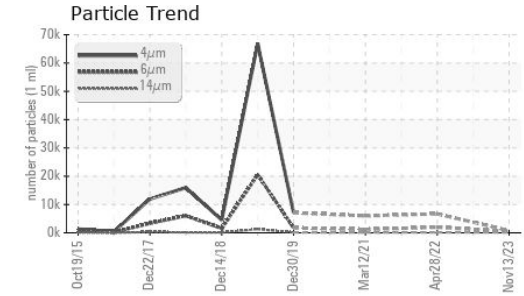
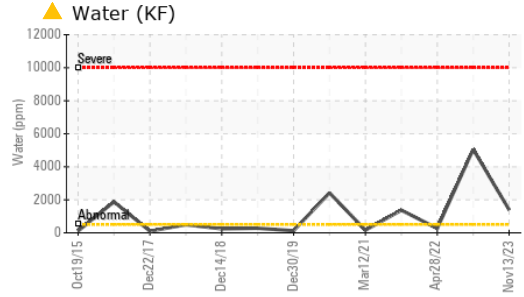
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		783	---	6682
Particles >6µm	ASTM D7647	>1300	427	---	▲ 1959
Particles >14µm	ASTM D7647	>80	73	---	▲ 109
Particles >21µm	ASTM D7647	>20	24	---	18
Particles >38µm	ASTM D7647	>4	4	---	1
Particles >71µm	ASTM D7647	>3	0	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	17/16/13	---	▲ 20/18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.29	0.37	0.32

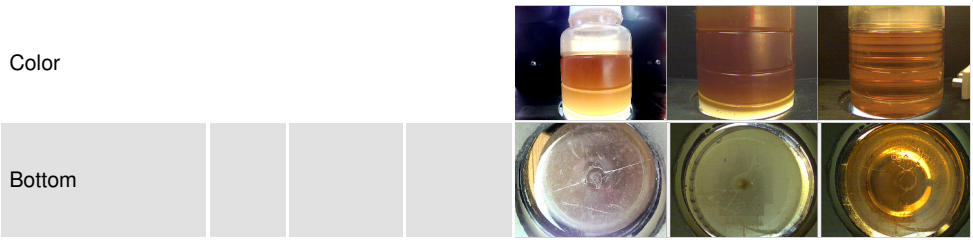
OIL ANALYSIS REPORT



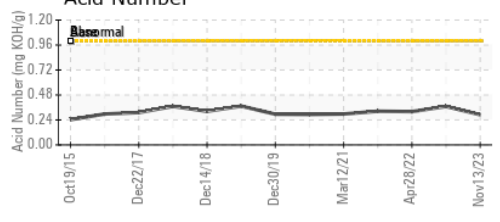
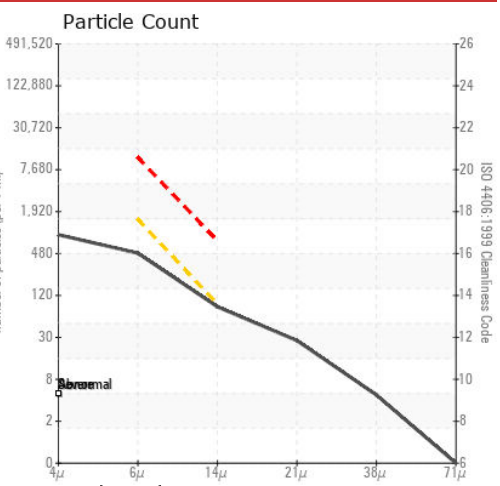
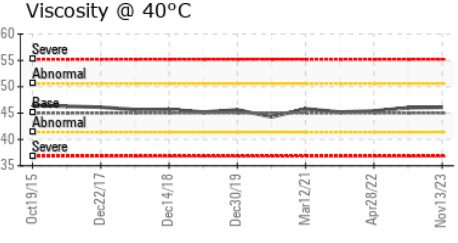
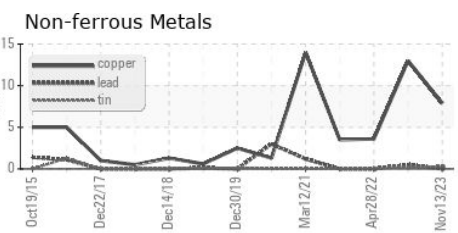
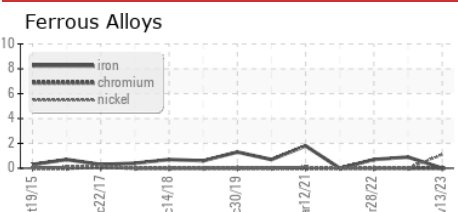
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		● >10%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.1	46.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA011290 **Received** : 20 Nov 2023
Lab Number : 06013344 **Diagnosed** : 29 Nov 2023
Unique Number : 10752488 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

GROWMARK INC
 7032 STATE ROUTE 111
 SOUTH ROXANA, IL
 US 62087
 Contact: SERVICE MANAGER
 mrwick@growmark.com

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)