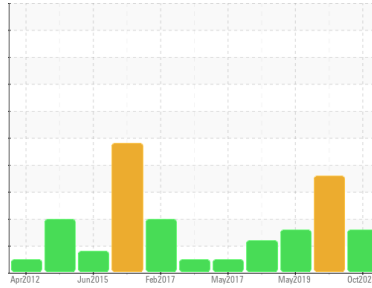




PROBLEM SUMMARY

Sample Rating Trend



WATER



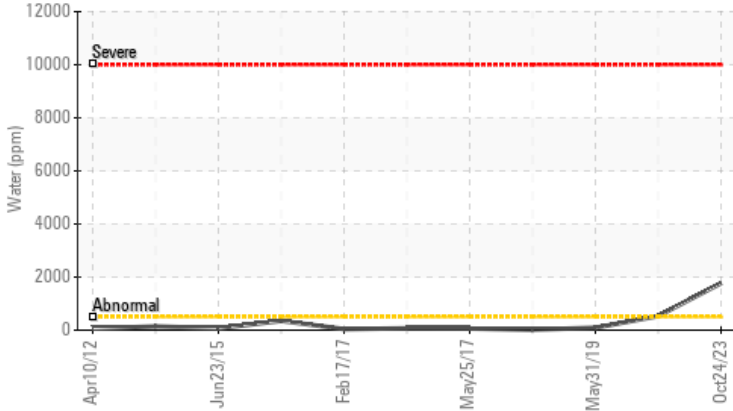
Machine Id
KAESER SM 15 4247637 (S/N 1062)

Component
Compressor

Fluid
KAESER SIGMA (OEM) FG-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				ABNORMAL	ABNORMAL	ATTENTION
Water	%	ASTM D6304	>0.05	▲ 0.177	▲ 0.053	0.009
ppm Water	ppm	ASTM D6304	>500	▲ 1770	▲ 530	90

Customer Id: GFMDAN
 Sample No.: KCPA004562
 Lab Number: 05996303
 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

14 Oct 2021 Diag: Doug Bogart

WATER



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 present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Free water present. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



31 May 2019 Diag: Angela Borella

WEAR



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. An increase in the aluminum level is noted. All other 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 acceptable for the time in service.

[view report](#)



14 Apr 2018 Diag: Angela Borella

ISO



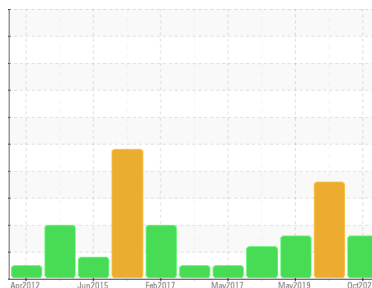
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



Machine Id
KAESER SM 15 4247637 (S/N 1062)

Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-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

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			KCPA004562	KCP39267	KCP18099
Sample Date	Client Info			24 Oct 2023	14 Oct 2021	31 May 2019
Machine Age	hrs	Client Info		41157	35580	34285
Oil Age	hrs	Client Info		0	1295	932
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	9	5	5
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	6	▲ 11
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	3	4	5
Tin	ppm	ASTM D5185m	>10	0	0	2
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

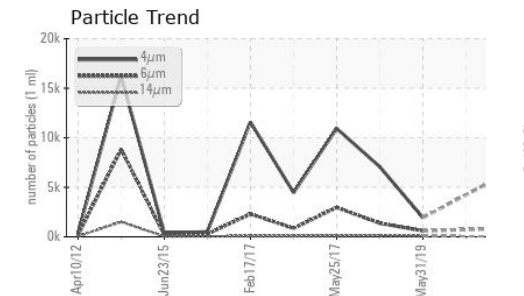
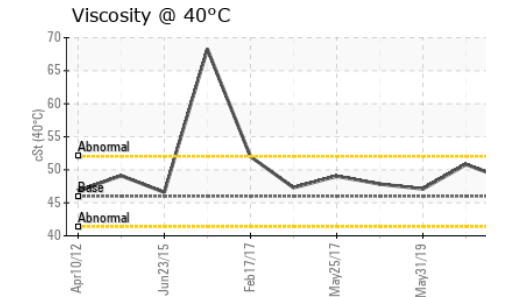
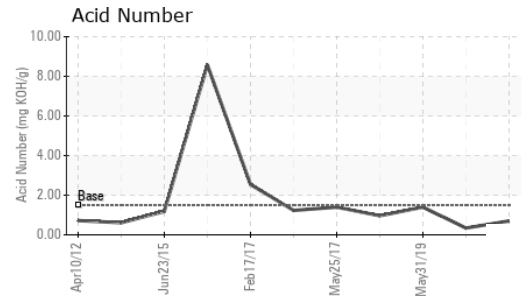
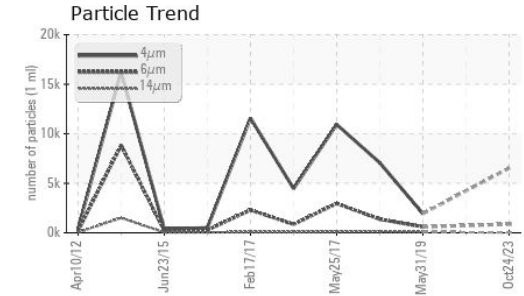
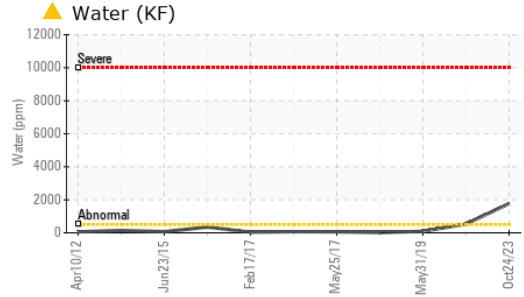
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		<1	0	<1
Calcium	ppm	ASTM D5185m		0	0	<1
Phosphorus	ppm	ASTM D5185m	500	246	156	423
Zinc	ppm	ASTM D5185m		202	123	135
Sulfur	ppm	ASTM D5185m		1373	1259	1329

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	2	4
Sodium	ppm	ASTM D5185m		3	<1	<1
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water	%	ASTM D6304	>0.05	▲ 0.177	▲ 0.053	0.009
ppm Water	ppm	ASTM D6304	>500	▲ 1770	▲ 530	90

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		6533	---	1931
Particles >6µm		ASTM D7647	>1300	867	---	603
Particles >14µm		ASTM D7647	>80	26	---	▲ 87
Particles >21µm		ASTM D7647	>20	8	---	▲ 31
Particles >38µm		ASTM D7647	>4	1	---	3
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	20/17/12	---	▲ 16/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	0.70	0.34	1.399

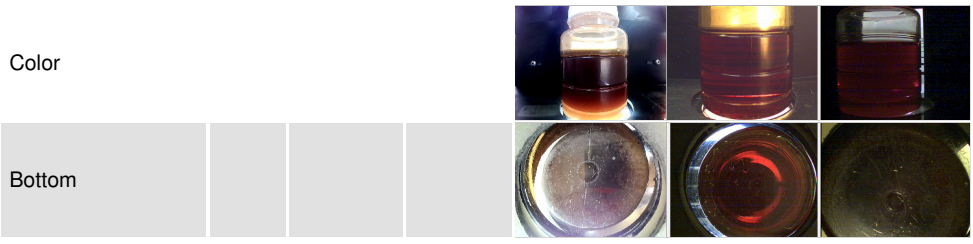
OIL ANALYSIS REPORT



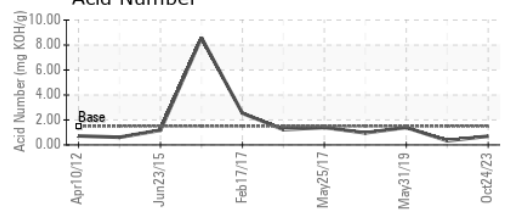
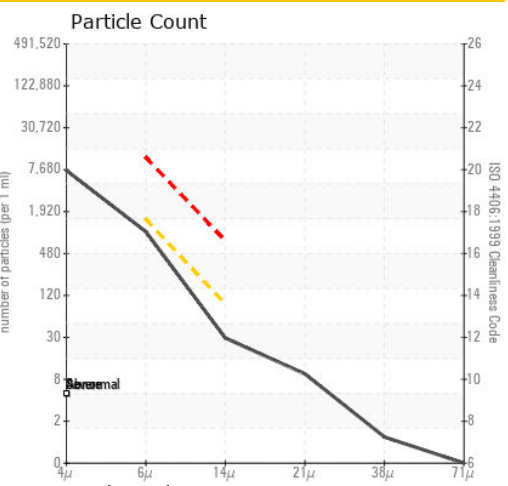
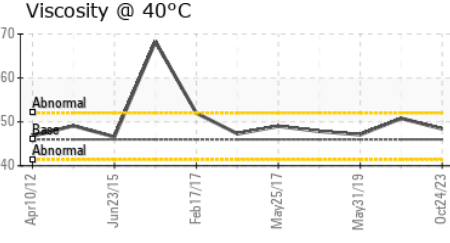
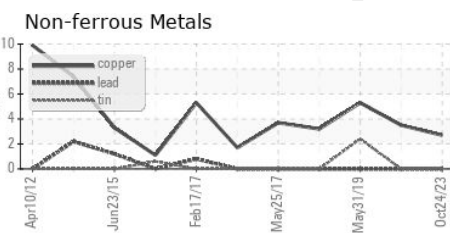
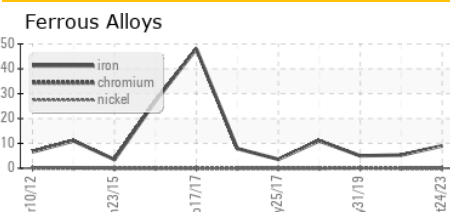
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	48.4	50.8	47.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004562 **Received** : 01 Nov 2023
Lab Number : 05996303 **Diagnosed** : 07 Nov 2023
Unique Number : 10724663 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

G & F MEDICAL
 33 CHERRY HILL DR
 DANVERS, MA
 US 01923
 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: