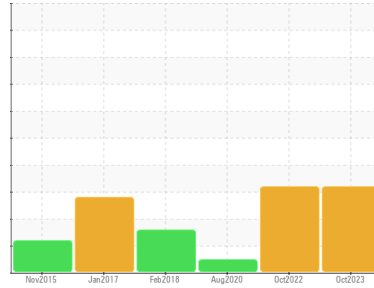




PROBLEM SUMMARY

Sample Rating Trend



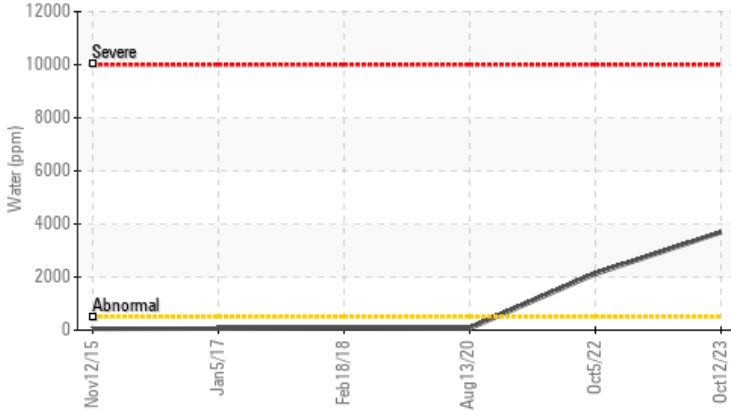
WATER



Machine Id
KAESER SM10 2920616 (S/N 1165)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



RECOMMENDATION

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	NORMAL
Water	%	ASTM D6304	>0.05	▲ 0.369	▲ 0.212	0.006
ppm Water	ppm	ASTM D6304	>500	▲ 3690	▲ 2120	66.1
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	▲ 2.0	NEG

Customer Id: HILWARPA
 Sample No.: KCPA007319
 Lab Number: 05996300
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

05 Oct 2022 Diag: Angela Borella

WATER



Oil and filter change at the time of sampling has been noted. There is too much water present in this sample to perform a particle count. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



13 Aug 2020 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



18 Feb 2018 Diag: Doug Bogart

ISO

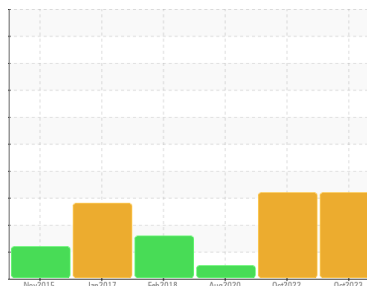


Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER SM10 2920616 (S/N 1165)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)



DIAGNOSIS

Recommendation

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. Free water present.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KCPA007319	KCP46708D	KC72952
Sample Date	Client Info	12 Oct 2023	05 Oct 2022	13 Aug 2020
Machine Age	hrs	45870	43910	40256
Oil Age	hrs	0	0	3139
Oil Changed	Client Info	N/A	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	0	0	0
Chromium	ppm ASTM D5185m >10	0	0	0
Nickel	ppm ASTM D5185m >3	0	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	0
Lead	ppm ASTM D5185m >10	0	3	0
Copper	ppm ASTM D5185m >50	12	24	16
Tin	ppm ASTM D5185m >10	<1	0	0
Antimony	ppm ASTM D5185m	---	---	0
Vanadium	ppm ASTM D5185m	<1	<1	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	0	12
Barium	ppm ASTM D5185m 90	<1	0	0
Molybdenum	ppm ASTM D5185m 0	0	0	0
Manganese	ppm ASTM D5185m	0	<1	0
Magnesium	ppm ASTM D5185m 100	19	1	0
Calcium	ppm ASTM D5185m 0	0	0	0
Phosphorus	ppm ASTM D5185m 0	23	17	6
Zinc	ppm ASTM D5185m 0	43	49	60
Sulfur	ppm ASTM D5185m 23500	16166	21933	15604

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<1	1	<1
Sodium	ppm ASTM D5185m	2	1	<1
Potassium	ppm ASTM D5185m >20	4	<1	0
Water	% ASTM D6304 >0.05	▲ 0.369	▲ 0.212	0.006
ppm Water	ppm ASTM D6304 >500	▲ 3690	▲ 2120	66.1

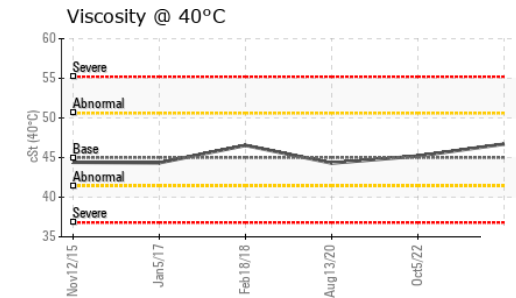
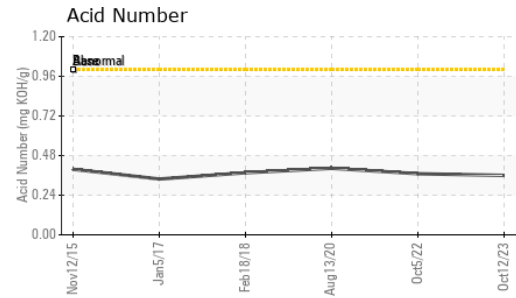
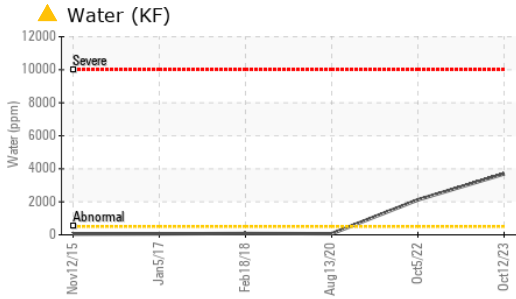
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	---	---	817
Particles >6µm	ASTM D7647 >1300	---	---	183
Particles >14µm	ASTM D7647 >80	---	---	13
Particles >21µm	ASTM D7647 >20	---	---	3
Particles >38µm	ASTM D7647 >4	---	---	0
Particles >71µm	ASTM D7647 >3	---	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	---	---	15/11

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.0	0.36	0.37	0.403

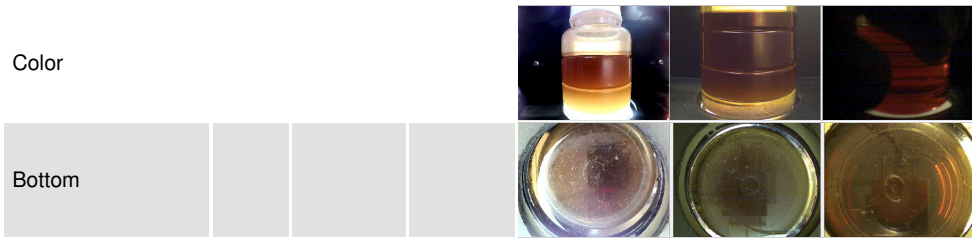
OIL ANALYSIS REPORT



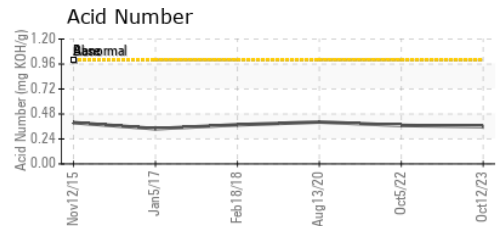
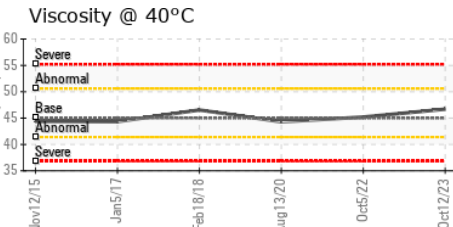
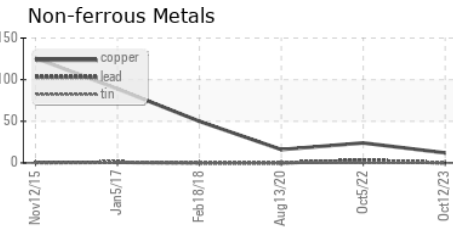
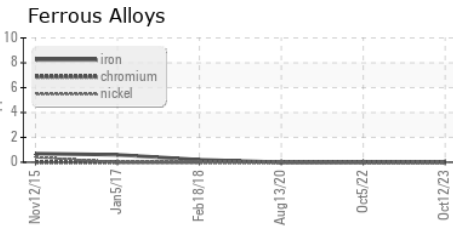
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	▲ 2.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	46.7	45.2	44.3

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. : KCPA007319 **Received** : 01 Nov 2023
Lab Number : 05996300 **Diagnosed** : 03 Nov 2023
Unique Number : 10724660 **Diagnostician** : Don Baldrige

HILLS CLEANERS
880 EASTON RD
WARRINGTON, PA
US 18976

Contact: Service Manager
hillscleaners.warrington@gmail.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)

T:
F: