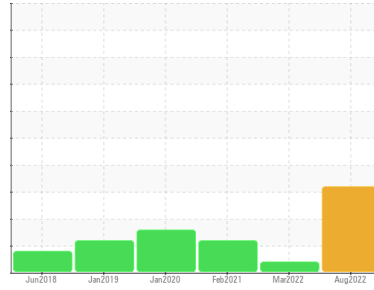


PROBLEM SUMMARY

Sample Rating Trend



WATER



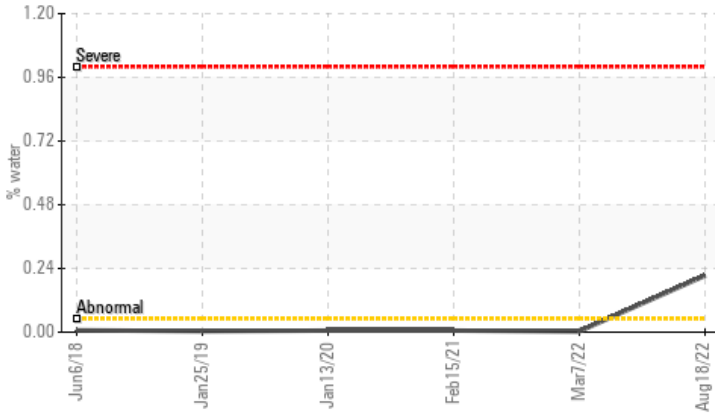
Machine Id
KAESER SM 10 5349925 (S/N 1038)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

There is too much water present in this sample to perform a particle count. 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	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ 0.213	0.003	0.006
ppm Water	ppm	ASTM D6304	>500	▲ 2130	34.0	66.4
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG	NEG
Free Water	scalar	*Visual		▲ 1.0	NEG	NEG

Customer Id: KROFOR
Sample No.: KCP48145
Lab Number: 05623892
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

07 Mar 2022 Diag: Don Baldrige

VIS DEBRIS



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. 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. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



15 Feb 2021 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 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



13 Jan 2020 Diag: Jonathan Hester

ISO



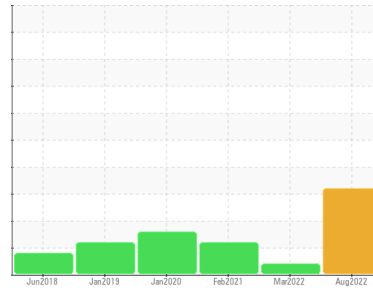
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER SM 10 5349925 (S/N 1038)

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



DIAGNOSIS

▲ Recommendation

There is too much water present in this sample to perform a particle count. 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	history 1	history 2
Sample Number			KCP48145	KCP42581	KCP28341
Sample Date			18 Aug 2022	07 Mar 2022	15 Feb 2021
Machine Age	hrs		31926	29972	25401
Oil Age	hrs		1954	4000	4000
Oil Changed			Not Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	0	<1	0
Chromium	ppm ASTM D5185m	>10	0	0	0
Nickel	ppm ASTM D5185m	>3	0	0	<1
Titanium	ppm ASTM D5185m	>3	0	0	0
Silver	ppm ASTM D5185m	>2	0	<1	<1
Aluminum	ppm ASTM D5185m	>10	<1	0	0
Lead	ppm ASTM D5185m	>10	0	0	<1
Copper	ppm ASTM D5185m	>50	11	18	22
Tin	ppm ASTM D5185m	>10	0	0	<1
Antimony	ppm ASTM D5185m		---	---	0
Vanadium	ppm ASTM D5185m		0	0	0
Cadmium	ppm ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m		0	2	10
Barium	ppm ASTM D5185m	90	5	0	0
Molybdenum	ppm ASTM D5185m		0	0	0
Manganese	ppm ASTM D5185m		0	0	0
Magnesium	ppm ASTM D5185m	90	21	0	3
Calcium	ppm ASTM D5185m	2	0	<1	0
Phosphorus	ppm ASTM D5185m		3	1	3
Zinc	ppm ASTM D5185m		32	4	7
Sulfur	ppm ASTM D5185m		17321	14322	16433

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<1	2	<1
Sodium	ppm ASTM D5185m		4	<1	2
Potassium	ppm ASTM D5185m	>20	0	0	<1
Water	% ASTM D6304	>0.05	▲ 0.213	0.003	0.006
ppm Water	ppm ASTM D6304	>500	▲ 2130	34.0	66.4

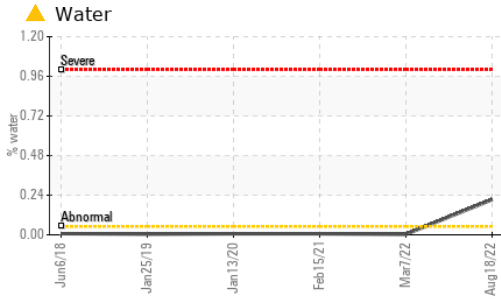
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		---	---	7032
Particles >6µm	ASTM D7647	>1300	---	---	▲ 3159
Particles >14µm	ASTM D7647	>80	---	---	▲ 380
Particles >21µm	ASTM D7647	>20	---	---	▲ 101
Particles >38µm	ASTM D7647	>4	---	---	4
Particles >71µm	ASTM D7647	>3	---	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	---	▲ 19/16

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	0.4	0.27	0.31	0.247

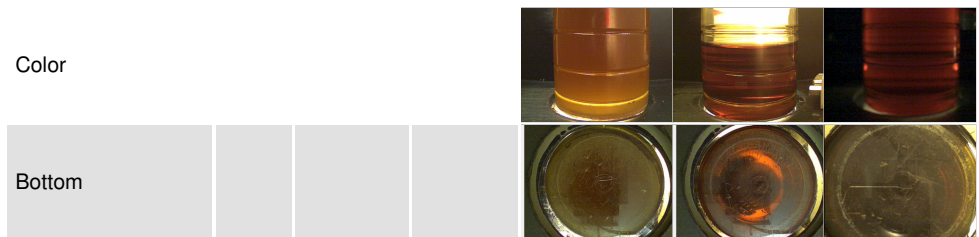
OIL ANALYSIS REPORT



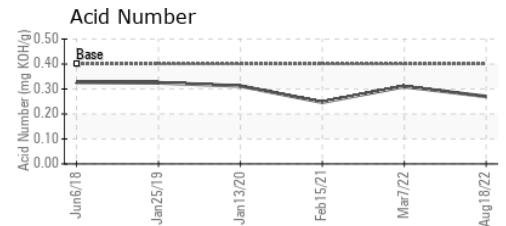
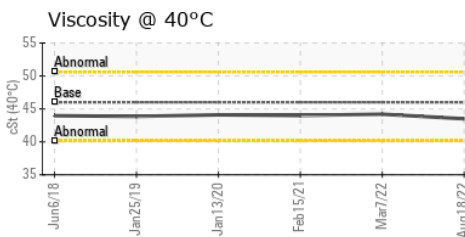
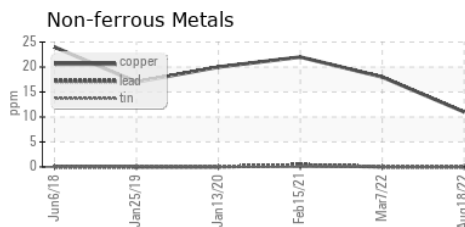
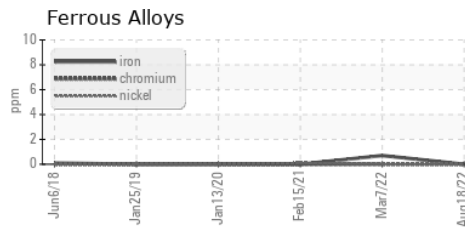
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	43.5	44.2

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP48145 **Received** : 22 Aug 2022
Lab Number : 05623892 **Diagnosed** : 24 Aug 2022
Unique Number : 10103399 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

KROGER DISTRIBUTION
 2000 ANVIL BLOCK RD
 FOREST PARK, GA
 USA 30297
 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: