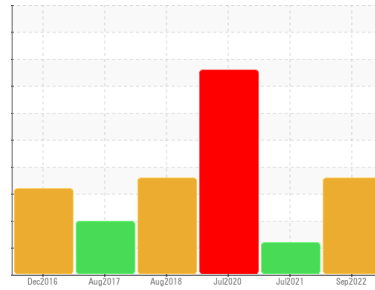


PROBLEM SUMMARY

Sample Rating Trend



WATER



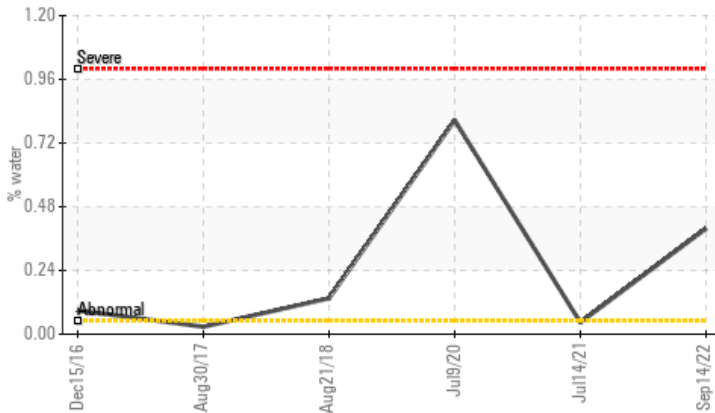
Machine Id
KAESER SK15T 3276980 (S/N 1114)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

The filter change at the time of sampling has been noted. 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.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	SEVERE
Water	%	ASTM D6304	>0.05	▲ 0.398	0.044	▲ 0.806
ppm Water	ppm	ASTM D6304	>500	▲ 3980	444.2	▲ 8060
Debris	scalar	*Visual	NONE	▲ MODER	NONE	▲ MODER
Free Water	scalar	*Visual		▲ 1.0	NEG	● 5.0

Customer Id: GROCUB
Sample No.: KCP33343
Lab Number: 05646584
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

Action	Status	Date	Done By	Description
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

14 Jul 2021 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



09 Jul 2020 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. There is too much water present in this sample to perform a particle count. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. There is a high concentration of water present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report



21 Aug 2018 Diag: Angela Borella

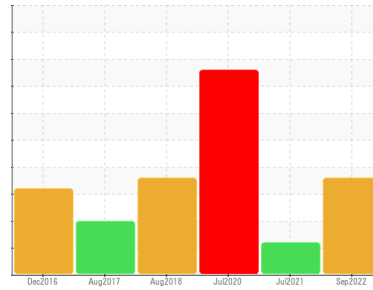
WATER



We advise that you shut down the unit and follow the water drain-off procedure for this component. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a high amount of particulates present in the oil. 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





Machine Id
KAESER SK15T 3276980 (S/N 1114)

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

DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. 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.

Wear

All component wear rates are normal.

▲ Contamination

Free water present. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number				KCP33343	KCP41660	KCP10549
Sample Date				14 Sep 2022	14 Jul 2021	09 Jul 2020
Machine Age	hrs			11162	10829	10519
Oil Age	hrs			3000	1500	3000
Oil Changed				Not Changed	Changed	Not Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
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	<1	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	<1
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>50	1	1	1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

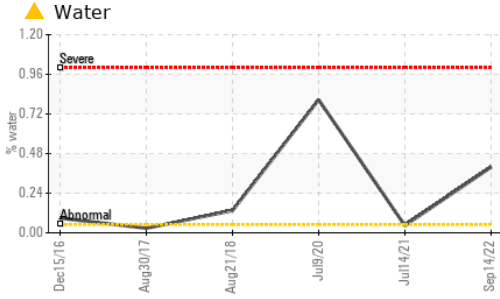
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	<1	<1
Barium	ppm	ASTM D5185m	90	5	1	19
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	100	52	65	53
Calcium	ppm	ASTM D5185m	0	<1	0	1
Phosphorus	ppm	ASTM D5185m	0	2	0	11
Zinc	ppm	ASTM D5185m	0	7	0	0
Sulfur	ppm	ASTM D5185m	23500	21169	17848	16030

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	0	0	3
Sodium	ppm	ASTM D5185m		2	9	1
Potassium	ppm	ASTM D5185m	>20	0	1	<1
Water	%	ASTM D6304	>0.05	▲ 0.398	0.044	▲ 0.806
ppm Water	ppm	ASTM D6304	>500	▲ 3980	444.2	▲ 8060

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		---	8861	---
Particles >6µm		ASTM D7647	>1300	---	▲ 2856	---
Particles >14µm		ASTM D7647	>80	---	▲ 330	---
Particles >21µm		ASTM D7647	>20	---	▲ 57	---
Particles >38µm		ASTM D7647	>4	---	2	---
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	1.0	0.38	0.357	0.310

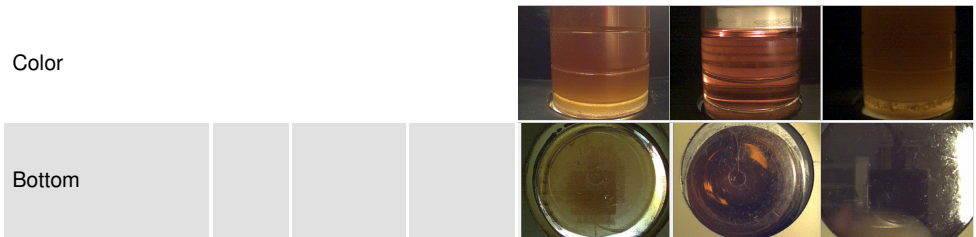
OIL ANALYSIS REPORT



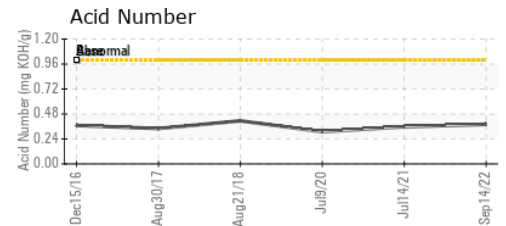
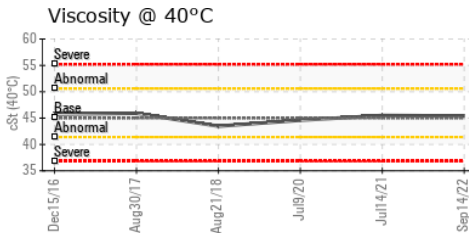
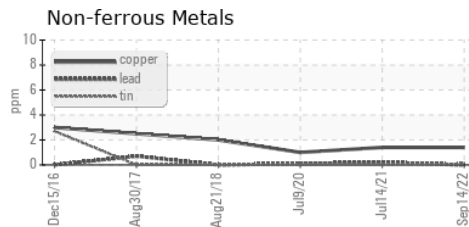
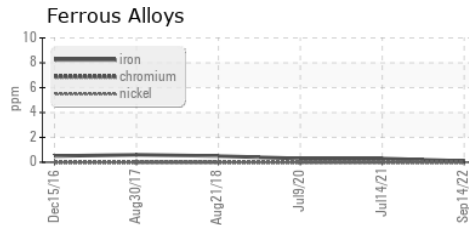
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	▲ 0.2%
Free Water	scalar	*Visual		▲ 1.0	◆ 5.0

FLUID PROPERTIES	method	limit/base	current	history 1	history 2	
Visc @ 40°C	cSt	ASTM D445	45	45.4	45.5	44.6

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. : KCP33343 **Received** : 20 Sep 2022
Lab Number : 05646584 **Diagnosed** : 22 Sep 2022
Unique Number : 10141123 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

GROW ALLIANCE
 613 N RANDOLPH ST
 CUBA CITY, WI
 USA 53807
 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: