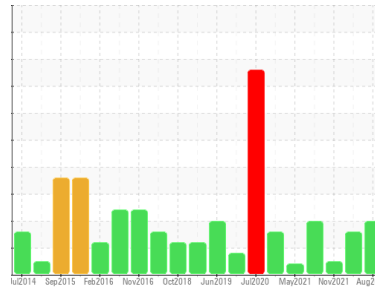


PROBLEM SUMMARY

Sample Rating Trend



WATER



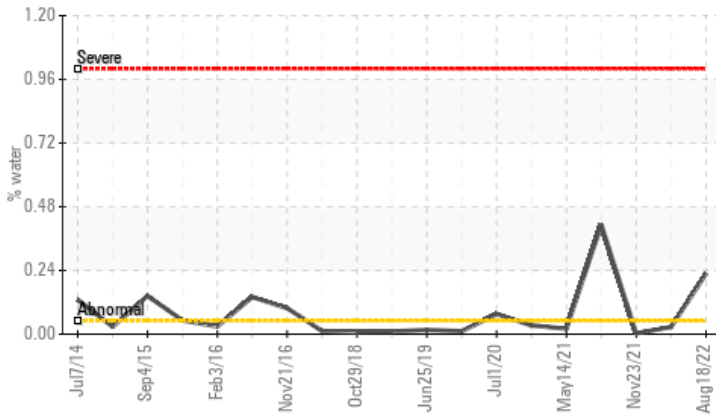
Machine Id
KAESER SK 15 4946533 (S/N 1564)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-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	ATTENTION	NORMAL
Water	%	ASTM D6304	>0.05	▲ 0.228	0.027	0.003
ppm Water	ppm	ASTM D6304	>500	▲ 2280	270.5	27.3
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: COPEAS
Sample No.: KC05637685
Lab Number: 05637685
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

20 Apr 2022 Diag: Angela Borella

ISO



The 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 suitable for further service.

view report



23 Nov 2021 Diag: Angela Borella

NORMAL



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. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



17 Aug 2021 Diag: Jonathan Hester

WATER



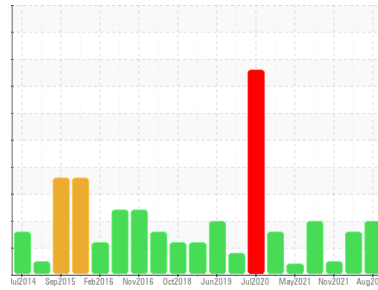
We advise that you stop the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a moderate 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. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER SK 15 4946533 (S/N 1564)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-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

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

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 history 1 history 2

Sample Number			KC05637685	KC05543237	KC05417200
Sample Date			18 Aug 2022	20 Apr 2022	23 Nov 2021
Machine Age	hrs		30061	28684	27136
Oil Age	hrs		0	1548	4232
Oil Changed			N/A	Not Changd	Changed
Sample Status			ABNORMAL	ATTENTION	NORMAL

WEAR METALS method limit/base current history 1 history 2

Iron	ppm	ASTM D5185m	>50	<1	<1	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	12	2	14
Tin	ppm	ASTM D5185m	>10	<1	0	0
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		<1	<1	0
Barium	ppm	ASTM D5185m	90	38	25	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	90	41	83	3
Calcium	ppm	ASTM D5185m	2	0	<1	0
Phosphorus	ppm	ASTM D5185m		0	4	4
Zinc	ppm	ASTM D5185m		19	5	32

CONTAMINANTS method limit/base current history 1 history 2

Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		1	9	1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.05	▲ 0.228	0.027	0.003
ppm Water	ppm	ASTM D6304	>500	▲ 2280	270.5	27.3

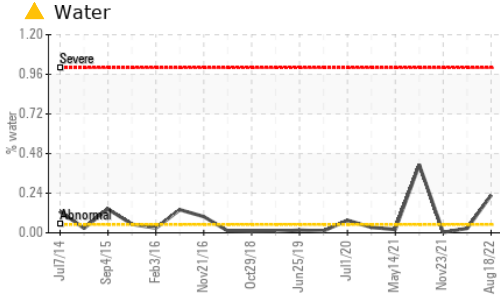
FLUID CLEANLINESS method limit/base current history 1 history 2

Particles >4µm		ASTM D7647		---	5599	2193
Particles >6µm		ASTM D7647	>1300	---	▲ 1560	677
Particles >14µm		ASTM D7647	>80	---	▲ 140	59
Particles >21µm		ASTM D7647	>20	---	▲ 34	10
Particles >38µm		ASTM D7647	>4	---	2	0
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 20/18/14	17/13

FLUID DEGRADATION method limit/base current history 1 history 2

Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.32	0.43	0.378
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OIL ANALYSIS REPORT

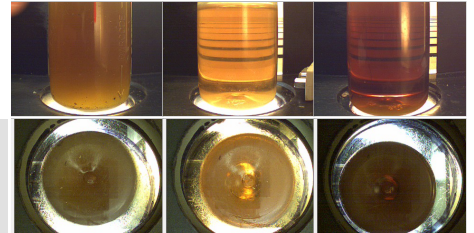


VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	43.6	44.1

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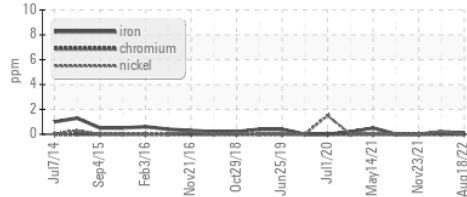
Color



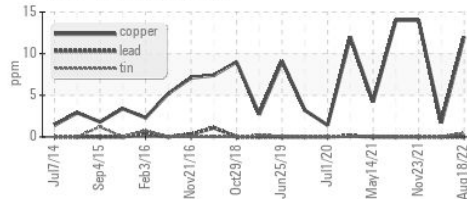
Bottom

GRAPHS

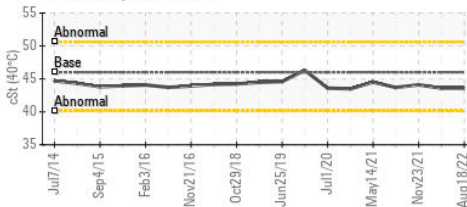
Ferrous Alloys



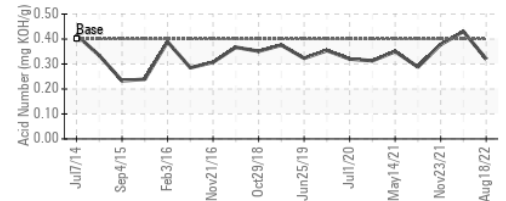
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05637685 **Received** : 09 Sep 2022
Lab Number : 05637685 **Diagnosed** : 12 Sep 2022
Unique Number : 10127215 **Diagnostician** : Jonathan Hester
Test Package : IND 2

COPE CLOSETS
 94 YAMARS DR
 EASTANOLLEE, GA
 USA 30538
 Contact:

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: