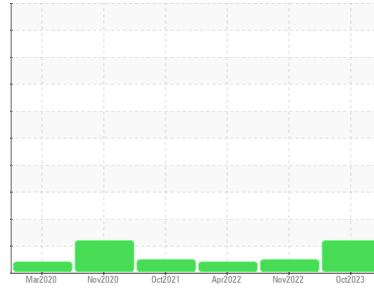




PROBLEM SUMMARY

Sample Rating Trend



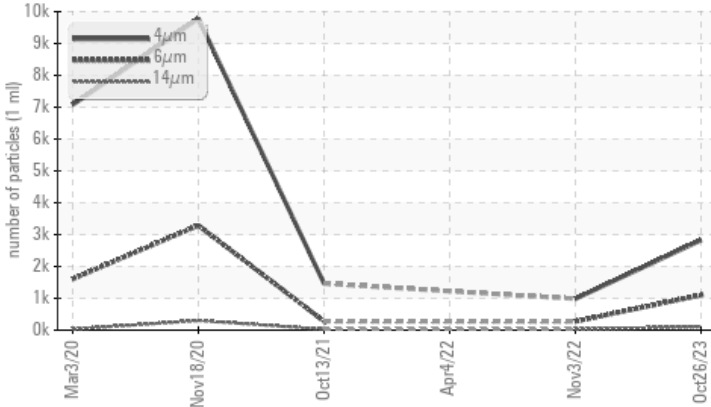
ISO



Machine Id
KAESER CSD 100T 5745760 (S/N 1096)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	ABNORMAL
Particles >14µm	ASTM D7647	>80	▲ 107	27	---
Particles >21µm	ASTM D7647	>20	▲ 26	8	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/17/14	17/15/12	---

Customer Id: BROVAN
 Sample No.: KCPA004686
 Lab Number: 05999885
 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

03 Nov 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. 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



04 Apr 2022 Diag: Doug Bogart

VIS DEBRIS



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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 suitable for further service.

view report



13 Oct 2021 Diag: Doug Bogart

NORMAL



No corrective action is recommended at this time. 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 no indication of any contamination in the oil. 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.

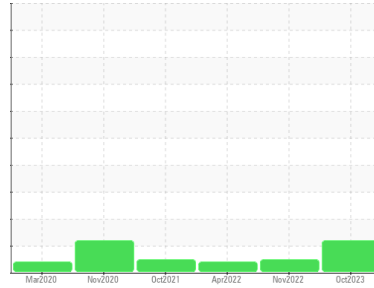
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER CSD 100T 5745760 (S/N 1096)

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates 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	history1	history2
Sample Number	Client Info	KCPA004686	KCP47513D	KCP45320
Sample Date	Client Info	26 Oct 2023	03 Nov 2022	04 Apr 2022
Machine Age	hrs	17886	13100	10244
Oil Age	hrs	0	8929	2951
Oil Changed	Client Info	N/A	Changed	Not Chngd
Sample Status		ATTENTION	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	0	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	0	<1
Aluminum	ppm	ASTM D5185m >10	<1	<1	2
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	11	14	3
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 90	4	11	50
Calcium	ppm	ASTM D5185m 2	0	0	<1
Phosphorus	ppm	ASTM D5185m	<1	3	6
Zinc	ppm	ASTM D5185m	0	18	5
Sulfur	ppm	ASTM D5185m	16720	20002	15839

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	0	1
Sodium	ppm	ASTM D5185m	3	5	14
Potassium	ppm	ASTM D5185m >20	0	<1	4
Water	%	ASTM D6304 >0.05	0.007	0.016	0.020
ppm Water	ppm	ASTM D6304 >500	70.2	160.8	208.9

FLUID CLEANLINESS

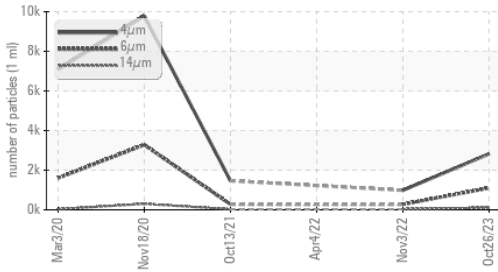
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	2826	984	---
Particles >6µm	ASTM D7647 >1300	1101	273	---
Particles >14µm	ASTM D7647 >80	▲ 107	27	---
Particles >21µm	ASTM D7647 >20	▲ 26	8	---
Particles >38µm	ASTM D7647 >4	1	1	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/17/14	17/15/12	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.40	0.36	0.36

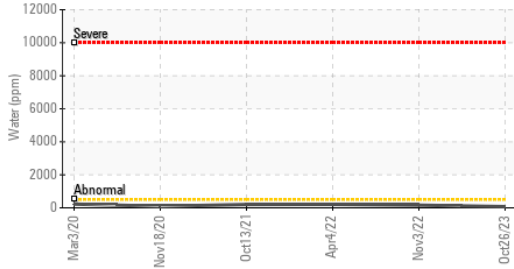
OIL ANALYSIS REPORT

▲ Particle Trend



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	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

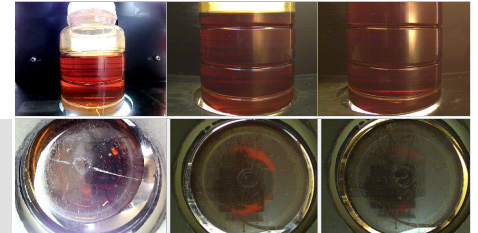
Water (KF)



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.0	44.7

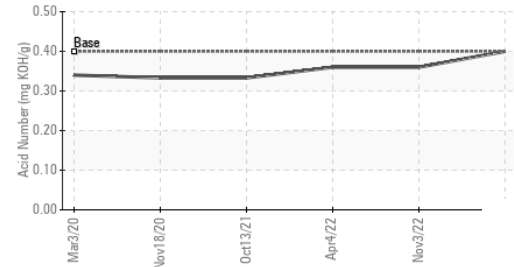
SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



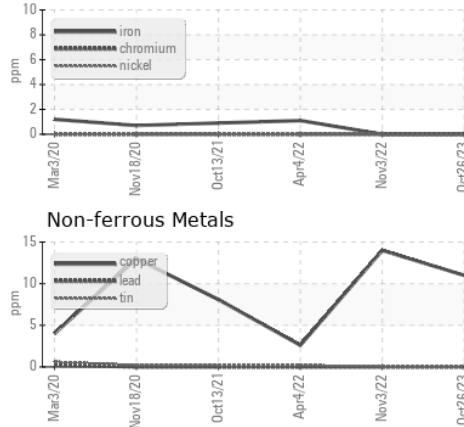
Bottom

Acid Number

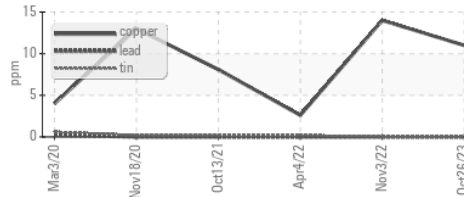


GRAPHS

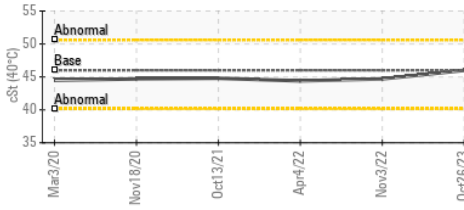
Ferrous Alloys



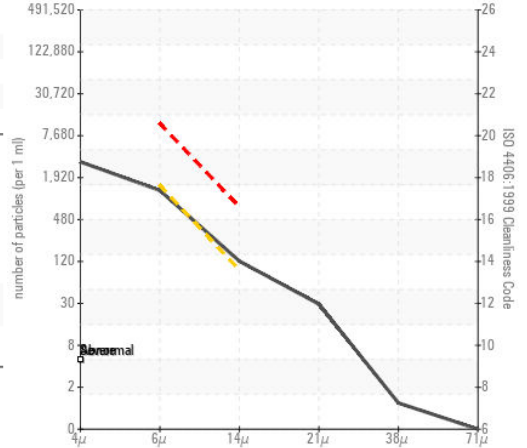
Non-ferrous Metals



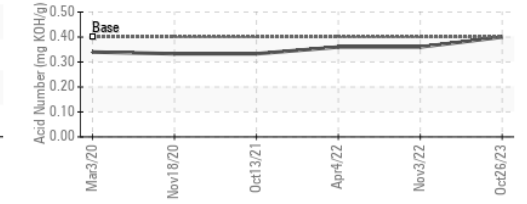
Viscosity @ 40°C



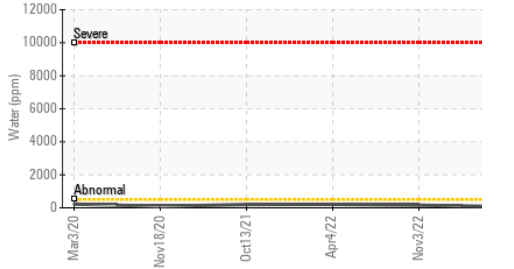
▲ Particle Count



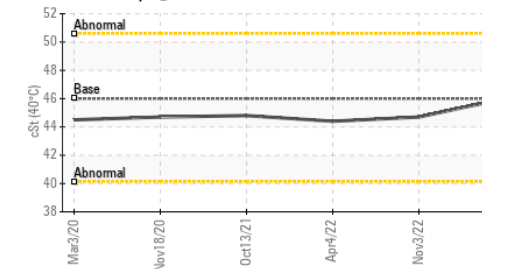
Acid Number



Water (KF)



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004686 **Received** : 06 Nov 2023
Lab Number : 05999885 **Diagnosed** : 08 Nov 2023
Unique Number : 10728245 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BROSE
 10100 BROSE DR
 VANCE, AL
 US 35490
 Contact: HERBERT LINDEMANN
 HERBERT.LINDEMANN@BROSE.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: