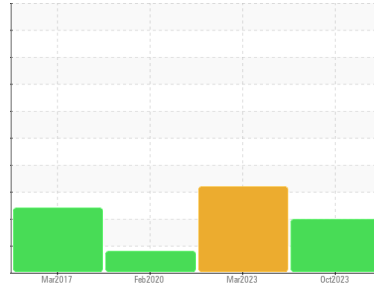


PROBLEM SUMMARY

Sample Rating Trend



ISO



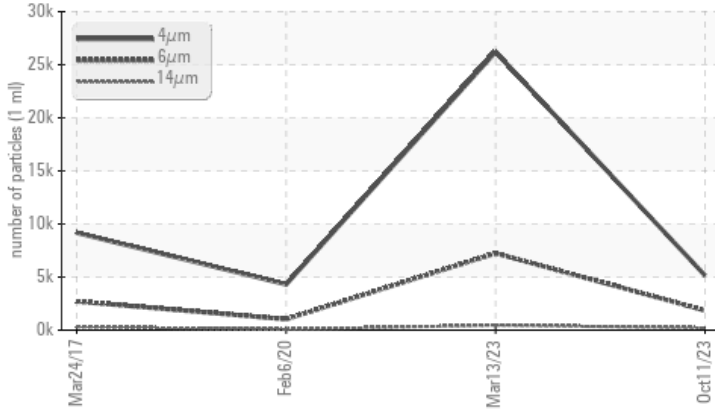
Machine Id
KAESER AIRCENTER SM 10 3110662 (S/N 1214)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1852	▲ 7236	1030
Particles >14µm	ASTM D7647	>80	▲ 203	▲ 467	68
Particles >21µm	ASTM D7647	>20	▲ 63	▲ 121	27
Particles >38µm	ASTM D7647	>4	▲ 6	5	6
Oil Cleanliness	ISO 4406 (c)	>17/13	▲ 18/15	▲ 20/16	17/13

Customer Id: PENCRA
Sample No.: KCPA007215
Lab Number: 05995035
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

WATER



13 Mar 2023 Diag: Angela Borella

The filter change at the time of sampling has been noted. 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. 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 acceptable for the time in service.

view report



WEAR



06 Feb 2020 Diag: Doug Bogart

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. The copper level is abnormal. All other 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



ISO



24 Mar 2017 Diag: Doug Bogart

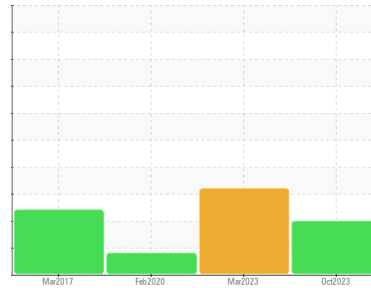
We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER AIRCENTER SM 10 3110662 (S/N 1214)

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

▲ Recommendation

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.

Wear

All component wear rates are normal.

▲ Contamination

There is a high 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	KCPA007215	KCPA001549	KCP20542
Sample Date	Client Info	11 Oct 2023	13 Mar 2023	06 Feb 2020
Machine Age	hrs	17579	16914	13889
Oil Age	hrs	0	0	2221
Oil Changed	Client Info	N/A	N/A	Changed
Sample Status		ABNORMAL	ABNORMAL	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	<1
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	0	0	0
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	24	13	▲ 59
Tin	ppm	ASTM D5185m >10	0	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	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	<1
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 100	0	6	0
Calcium	ppm	ASTM D5185m 0	0	0	<1
Phosphorus	ppm	ASTM D5185m 0	0	<1	0
Zinc	ppm	ASTM D5185m 0	22	42	0
Sulfur	ppm	ASTM D5185m 23500	18759	21648	15133

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	2	<1
Sodium	ppm	ASTM D5185m	1	2	0
Potassium	ppm	ASTM D5185m >20	1	0	0
Water	%	ASTM D6304 >0.05	0.005	▲ 0.060	0.007
ppm Water	ppm	ASTM D6304 >500	59.4	▲ 600	75.0

FLUID CLEANLINESS

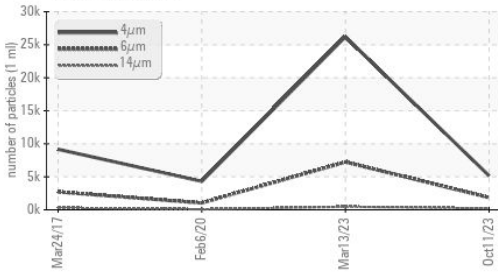
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	5155	26204	4310
Particles >6µm	ASTM D7647 >1300	▲ 1852	▲ 7236	1030
Particles >14µm	ASTM D7647 >80	▲ 203	▲ 467	68
Particles >21µm	ASTM D7647 >20	▲ 63	▲ 121	27
Particles >38µm	ASTM D7647 >4	▲ 6	5	6
Particles >71µm	ASTM D7647 >3	▲ 1	0	2
Oil Cleanliness	ISO 4406 (c) >17/13	▲ 18/15	▲ 20/16	17/13

FLUID DEGRADATION

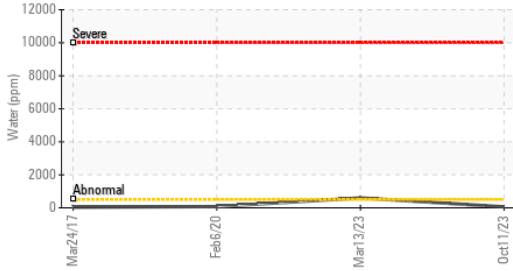
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.34	0.32	0.338

OIL ANALYSIS REPORT

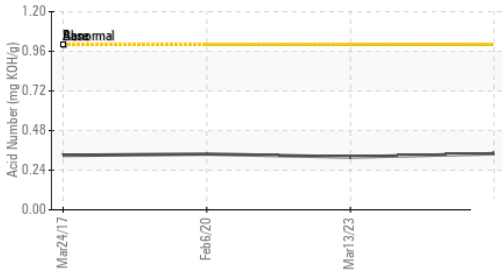
Particle Trend



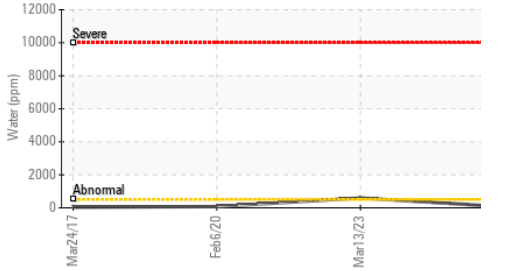
Water (KF)



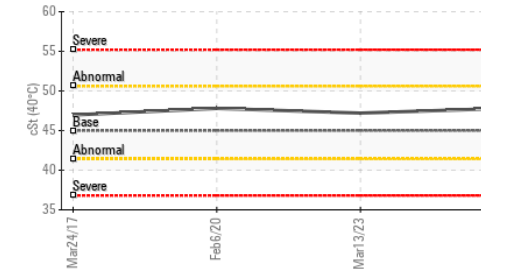
Acid Number



Water (KF)



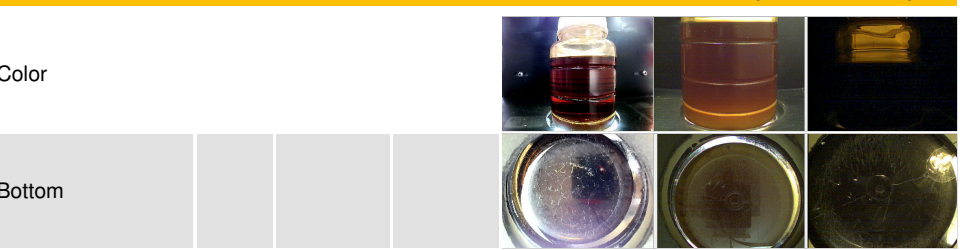
Viscosity @ 40°C



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	LIGHT
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	0.2%
Free Water	scalar	*Visual		NEG	NEG

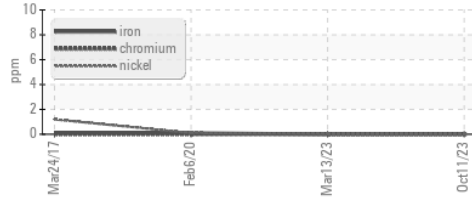
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	47.8	47.2

SAMPLE IMAGES

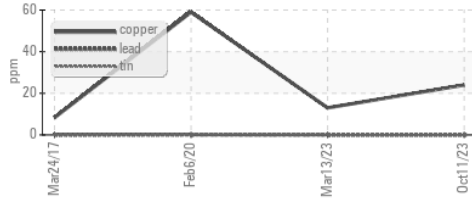


GRAPHS

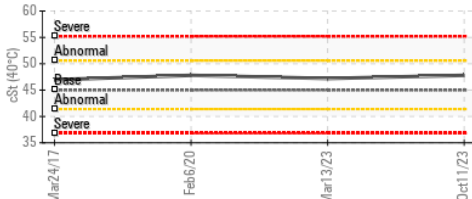
Ferrous Alloys



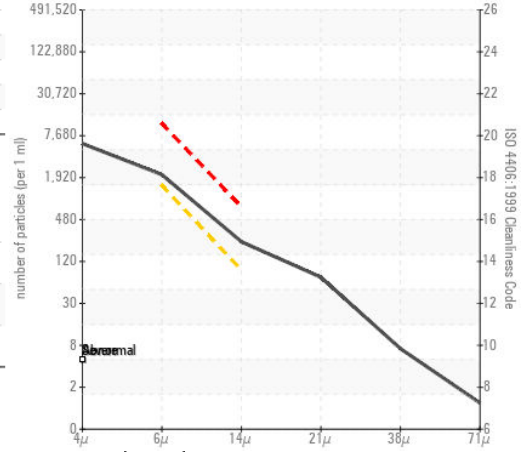
Non-ferrous Metals



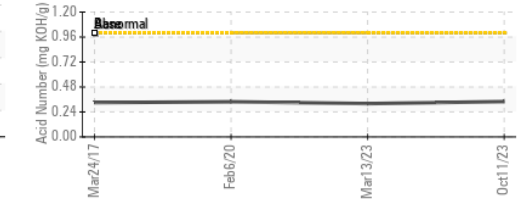
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA007215 **Received** : 31 Oct 2023
Lab Number : 05995035 **Diagnosed** : 02 Nov 2023
Unique Number : 10723395 **Diagnostician** : Don Baldrige

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

PENSKE TRUCK LEASING
 65 AMFLEX DR
 CRANSTON, RI
 US 02921
 Contact: JOHN PALMER
 john.palmer@penske.com

T:
F: