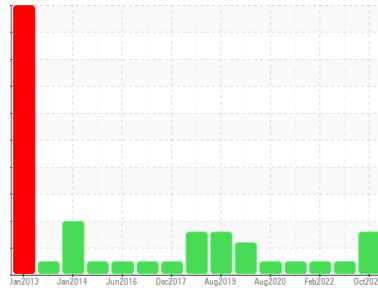




PROBLEM SUMMARY

Sample Rating Trend



ISO



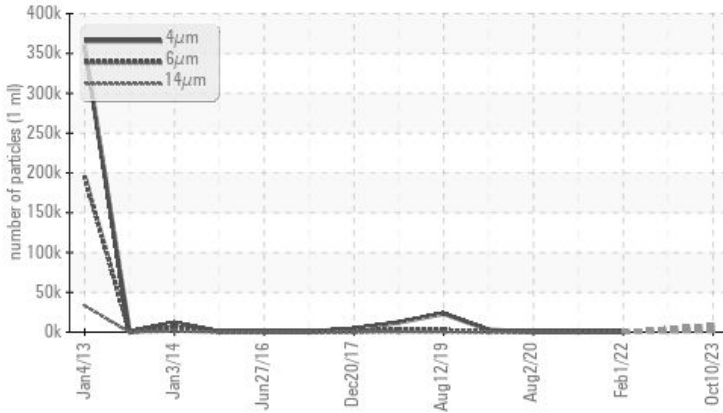
Machine Id
KAESER BSD-50 4358746 (S/N 1010)

Component
Compressor

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

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	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 2855	---	56
Particles >14µm	ASTM D7647	>80	▲ 238	---	16
Particles >21µm	ASTM D7647	>20	▲ 63	---	7
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	---	13/11

Customer Id: KEYBET
Sample No.: KC126045
Lab Number: 05981242
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

26 Jan 2023 Diag: Don Baldrige

NORMAL



Oil and 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 on this sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



01 Feb 2022 Diag: Jonathan Hester

NORMAL



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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Jan 2021 Diag: Don Baldrige

NORMAL



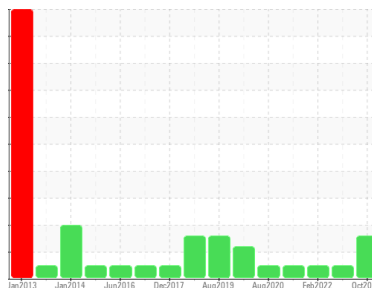
Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER BSD-50 4358746 (S/N 1010)

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



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		KC126045	KC100678	KC95100
Sample Date	Client Info		10 Oct 2023	26 Jan 2023	01 Feb 2022
Machine Age	hrs	Client Info	47112	45081	40312
Oil Age	hrs	Client Info	0	4769	3640
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	0	0
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	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	11	9	6
Tin	ppm	ASTM D5185m >10	0	0	0
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	0
Magnesium	ppm	ASTM D5185m 90	0	<1	0
Calcium	ppm	ASTM D5185m 2	0	0	0
Phosphorus	ppm	ASTM D5185m	<1	36	6
Zinc	ppm	ASTM D5185m	0	7	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	7	7
Sodium	ppm	ASTM D5185m	<1	<1	<1
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	0.004	0.005	0.004
ppm Water	ppm	ASTM D6304 >500	43.9	55.2	44.9

FLUID CLEANLINESS

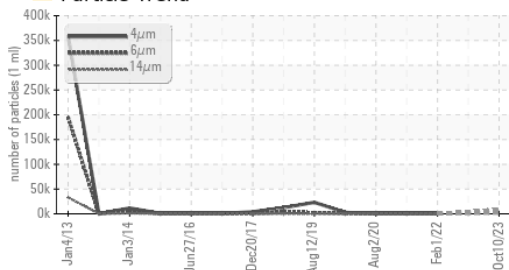
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		8647	---	139
Particles >6µm	ASTM D7647	>1300	▲ 2855	---	56
Particles >14µm	ASTM D7647	>80	▲ 238	---	16
Particles >21µm	ASTM D7647	>20	▲ 63	---	7
Particles >38µm	ASTM D7647	>4	2	---	1
Particles >71µm	ASTM D7647	>3	0	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	---	13/11

FLUID DEGRADATION

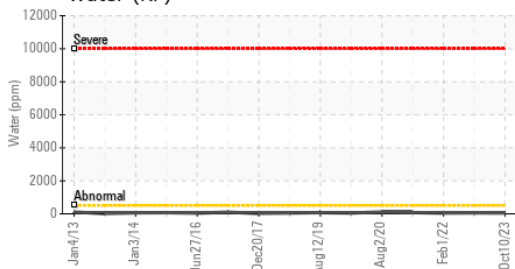
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.29	0.28	0.21

OIL ANALYSIS REPORT

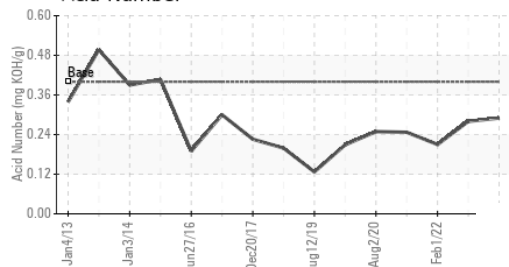
▲ Particle Trend



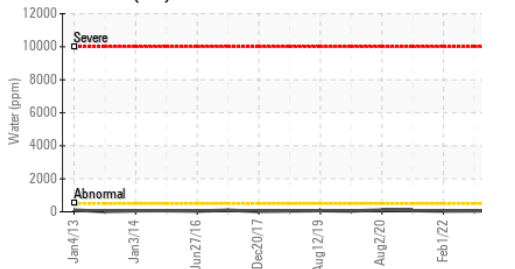
Water (KF)



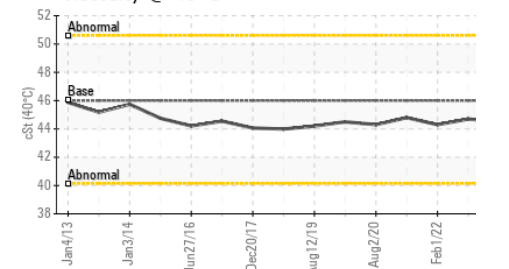
Acid Number



Water (KF)



Viscosity @ 40°C

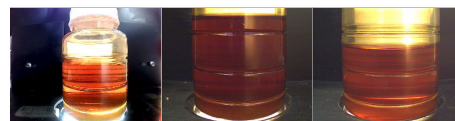


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

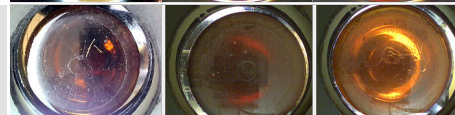
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.5	44.7	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

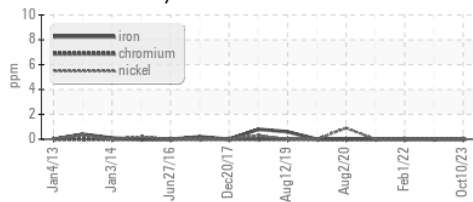


Bottom

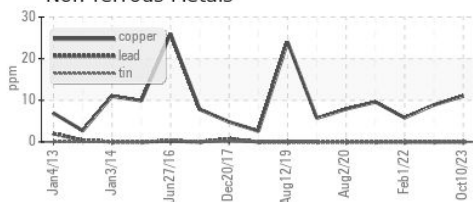


GRAPHS

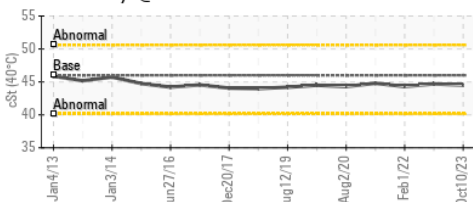
Ferrous Alloys



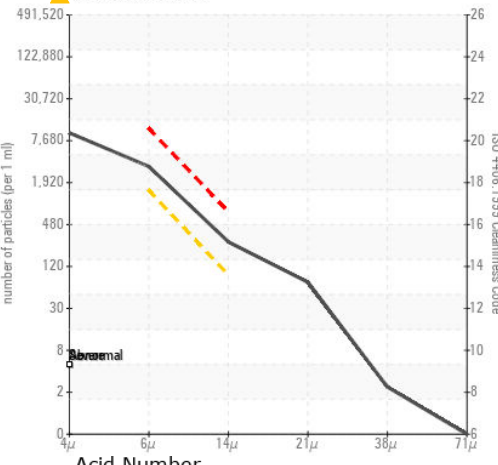
Non-ferrous Metals



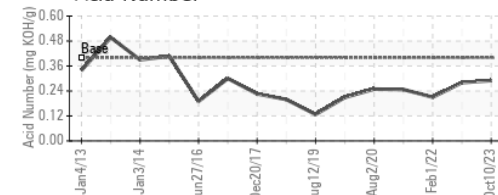
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KC126045
 Lab Number : 05981242
 Unique Number : 10698537
 Test Package : IND 2

KEYSTONE AUTOMOTIVE
 3658 ROUTE 378
 BETHLEHEM, PA
 US 18015
 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: