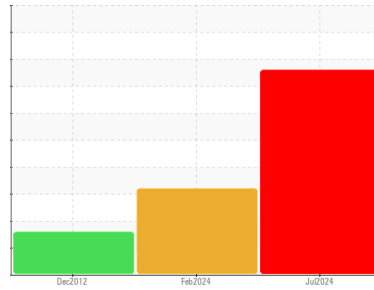




PROBLEM SUMMARY

Sample Rating Trend

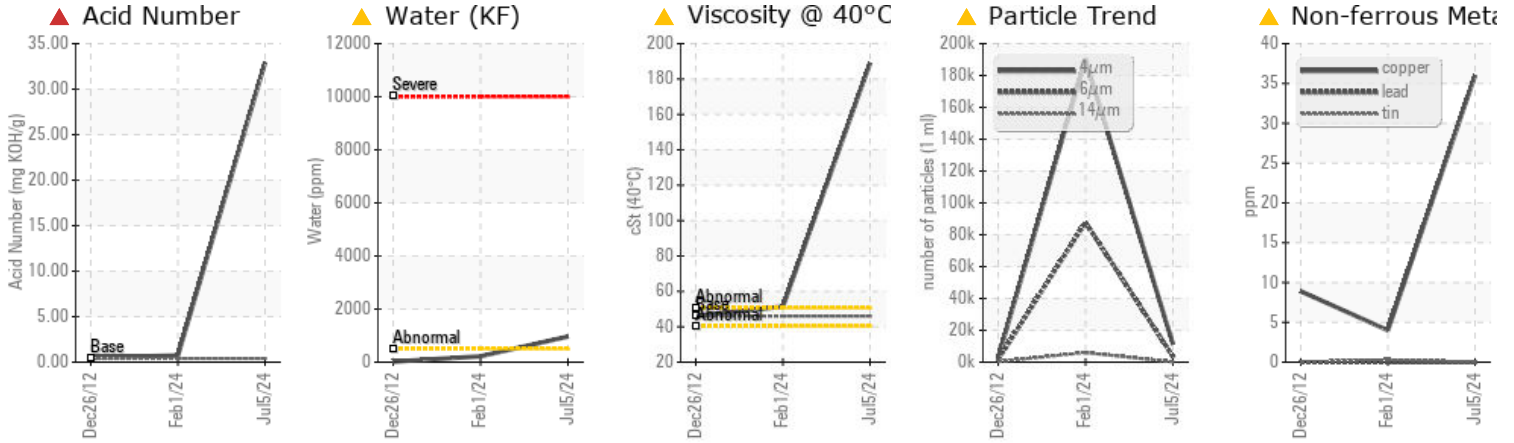


DEGRADATION



Machine Id
KAESER BSD 50 4400191 (S/N 1151)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Copper	ppm	ASTM D5185m	>50	▲ 36	4	9
Water	%	ASTM D6304	>0.05	▲ 0.096	0.022	0.002
ppm Water	ppm	ASTM D6304	>500	▲ 964	221	20
Particles >6µm		ASTM D7647	>1300	▲ 3525	▲ 87736	▲ 1592
Particles >14µm		ASTM D7647	>80	▲ 149	▲ 5993	▲ 271
Particles >21µm		ASTM D7647	>20	▲ 21	▲ 1265	▲ 91
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/19/14	▲ 25/24/20	▲ 18/15
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	▲ 32.91	0.73	0.517
Visc @ 40°C	cSt	ASTM D445	46	▲ 189	51.4	46.23

Customer Id: PAVCHAKC
 Sample No.: KCPA020077
 Lab Number: 06233840
 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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check For Overheating	---	---	?	We advise that you check for a possible overheat condition.

HISTORICAL DIAGNOSIS

ADDITIVES



01 Feb 2024 Diag: Jonathan Hester

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 high amount of particulates present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

view report



ISO



26 Dec 2012 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 condition of the oil is suitable for further service.

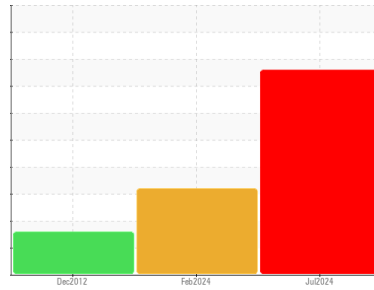
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
KAESER BSD 50 4400191 (S/N 1151)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

An increase in the copper level is noted.

Contamination

There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil viscosity is higher than normal. TAN level indicates possible presence of varnish. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA020077	KCP36734	KC33534
Sample Date	Client Info		05 Jul 2024	01 Feb 2024	26 Dec 2012
Machine Age	hrs	Client Info	74262	70852	0
Oil Age	hrs	Client Info	6000	2000	0
Oil Changed	Client Info		Changed	Not Changd	N/A
Sample Status			SEVERE	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	6	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	0
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	▲ 36	4	9
Tin	ppm	ASTM D5185m >10	0	<1	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	17	0	0
Barium	ppm	ASTM D5185m 90	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 90	10	0	3
Calcium	ppm	ASTM D5185m 2	13	0	0
Phosphorus	ppm	ASTM D5185m	271	● 264	2
Zinc	ppm	ASTM D5185m	314	● 114	12
Sulfur	ppm	ASTM D5185m	136	● 1392	17844

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	0	<1
Sodium	ppm	ASTM D5185m	49	21	2
Potassium	ppm	ASTM D5185m >20	11	2	7
Water	%	ASTM D6304 >0.05	▲ 0.096	0.022	0.002
ppm Water	ppm	ASTM D6304 >500	▲ 964	221	20

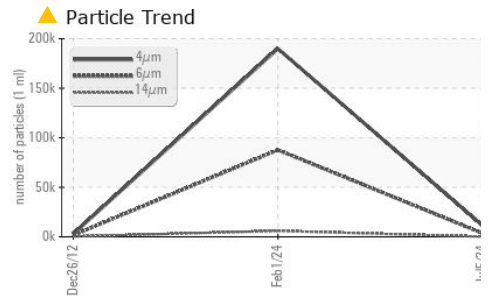
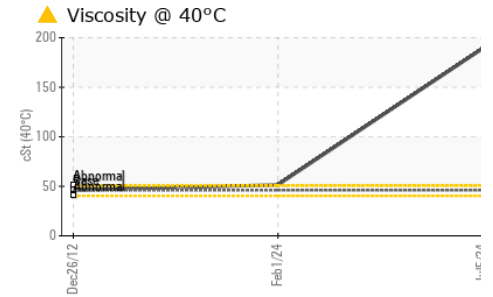
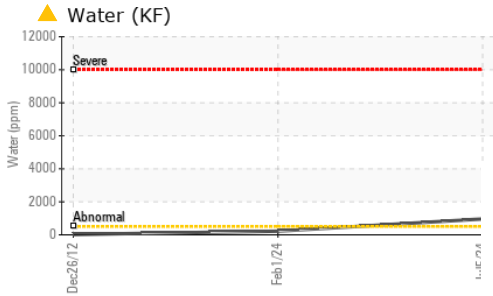
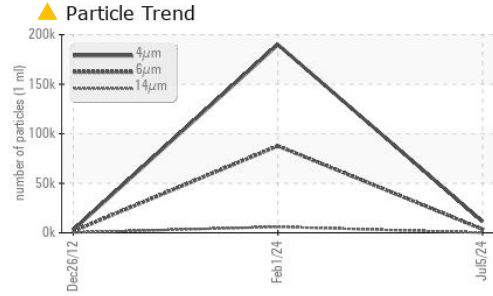
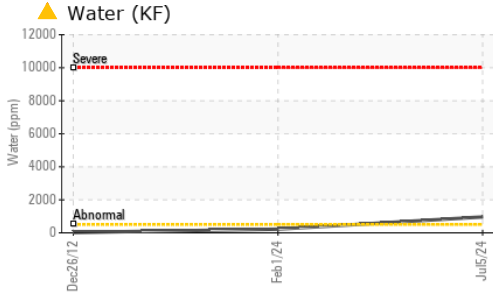
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		11406	189904	2923
Particles >6µm	ASTM D7647 >1300		▲ 3525	▲ 87736	▲ 1592
Particles >14µm	ASTM D7647 >80		▲ 149	▲ 5993	▲ 271
Particles >21µm	ASTM D7647 >20		▲ 21	▲ 1265	▲ 91
Particles >38µm	ASTM D7647 >4		1	▲ 25	▲ 14
Particles >71µm	ASTM D7647 >3		0	1	1
Oil Cleanliness	ISO 4406 (c) >--/17/13		▲ 21/19/14	▲ 25/24/20	▲ 18/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	▲ 32.91	0.73	0.517

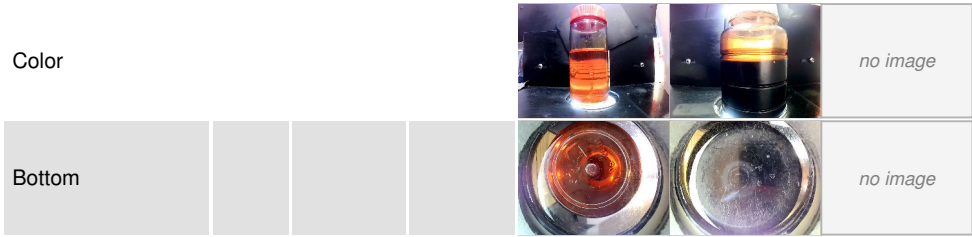
OIL ANALYSIS REPORT



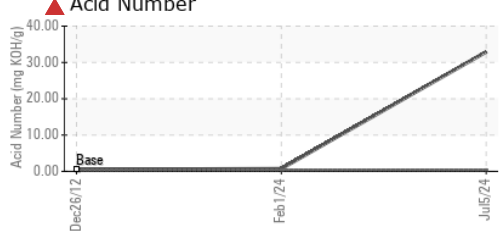
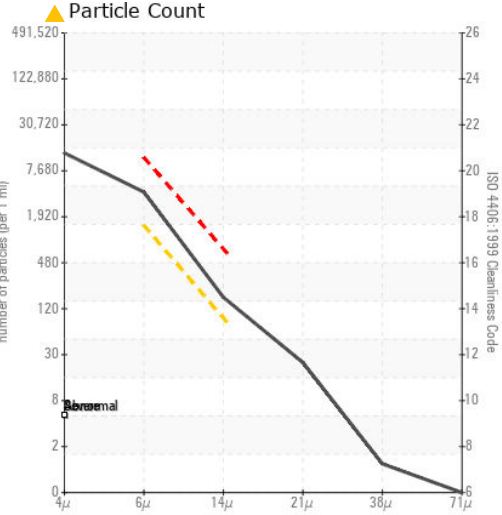
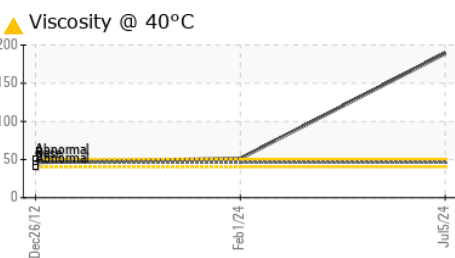
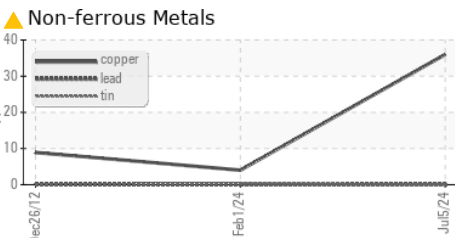
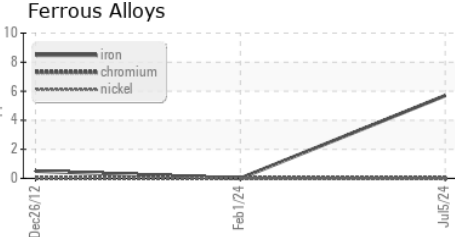
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	▲ 189	51.4	46.23

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA020077 **Received** : 11 Jul 2024
Lab Number : 06233840 **Tested** : 16 Jul 2024
Unique Number : 11122674 **Diagnosed** : 16 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PAVESTONE
 1101 WESTINGHOUSE BLVD
 CHARLOTTE, NC
 US 28273
 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: