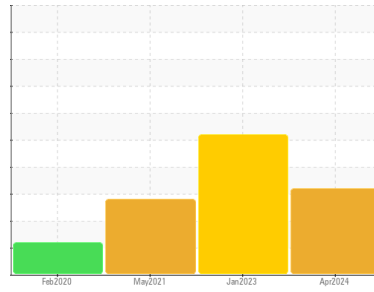




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER 5348754 (S/N 1221)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

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.

Wear

All component wear rates are normal.

Contamination

There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA016823	KCP54658	KCP33550
Sample Date	Client Info		02 Apr 2024	27 Jan 2023	06 May 2021
Machine Age	hrs	Client Info	12414	10597	7651
Oil Age	hrs	Client Info	1817	2946	1752
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	<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	0	0	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	7	▲ 34	6
Tin	ppm	ASTM D5185m >10	0	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	12
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 100	17	<1	29
Calcium	ppm	ASTM D5185m 0	0	0	<1
Phosphorus	ppm	ASTM D5185m 0	1	16	4
Zinc	ppm	ASTM D5185m 0	67	7	26
Sulfur	ppm	ASTM D5185m 23500	20629	21581	17487

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	3	1
Sodium	ppm	ASTM D5185m	7	<1	12
Potassium	ppm	ASTM D5185m >20	0	0	<1
Water	%	ASTM D6304 >0.05	▲ 0.338	▲ 0.227	▲ 0.176
ppm Water	ppm	ASTM D6304 >500	▲ 3380	▲ 2270	▲ 1760

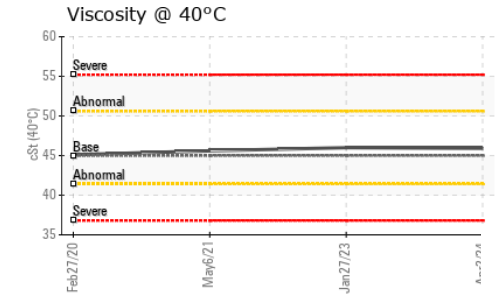
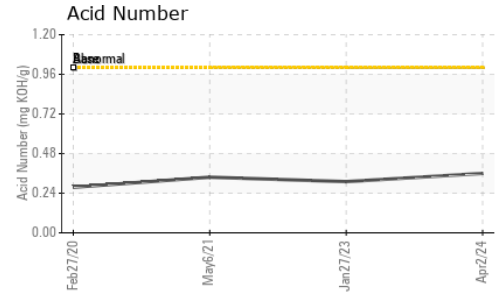
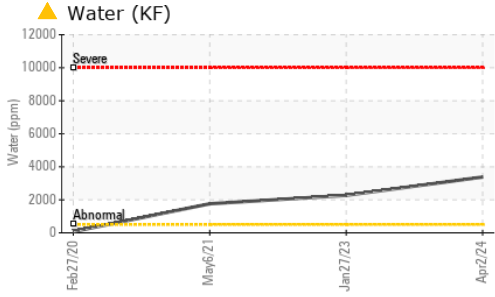
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	---	---
Particles >6µm	ASTM D7647	>1300	---	---	---
Particles >14µm	ASTM D7647	>80	---	---	---
Particles >21µm	ASTM D7647	>20	---	---	---
Particles >38µm	ASTM D7647	>4	---	---	---
Particles >71µm	ASTM D7647	>3	---	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.36	0.31	0.337

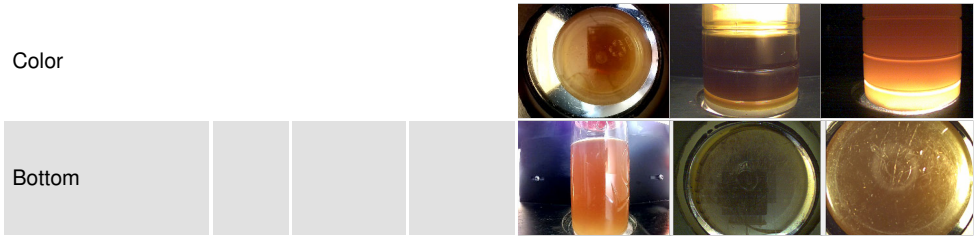
OIL ANALYSIS REPORT



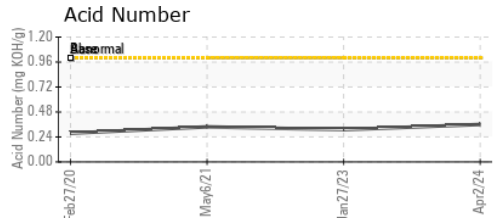
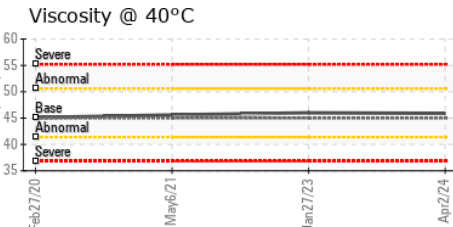
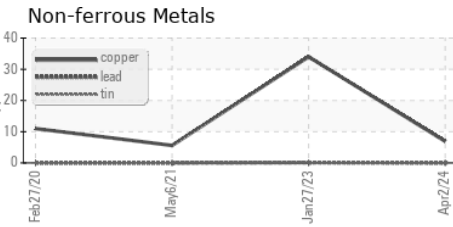
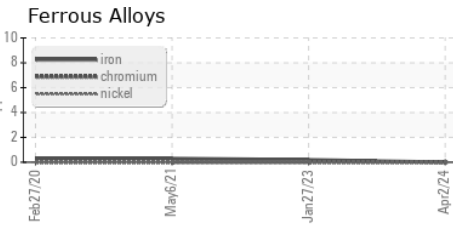
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	0.2%
Free Water	scalar	*Visual		▲ >10%	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	45.9	46.0	45.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016823 **Received** : 09 Apr 2024
Lab Number : 06143094 **Tested** : 11 Apr 2024
Unique Number : 10967902 **Diagnosed** : 11 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

J & E AUTO BODY
 13 N MAIN ST
 BRANFORD, CT
 US 06405
 Contact: JOE IAMUNNO
 joeiamunno@gmail.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)