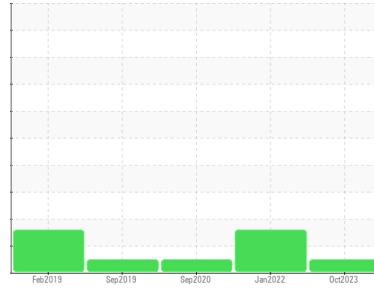




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER AS 25T 5536195 (S/N 1254)

Component
Compressor

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		KCPA006233	KCP38164	KCP30391
Sample Date	Client Info		01 Oct 2023	27 Jan 2022	15 Sep 2020
Machine Age	hrs	Client Info	29900	18739	9324
Oil Age	hrs	Client Info	0	2034	3870
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

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	0
Aluminum	ppm	ASTM D5185m >10	1	<1	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	10	8	17
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	0	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	<1	<1
Barium	ppm	ASTM D5185m 90	0	20	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 100	<1	75	18
Calcium	ppm	ASTM D5185m 0	0	7	0
Phosphorus	ppm	ASTM D5185m 0	3	9	2
Zinc	ppm	ASTM D5185m 0	0	30	77
Sulfur	ppm	ASTM D5185m 23500	17893	17992	18978

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	2	2
Sodium	ppm	ASTM D5185m	0	31	4
Potassium	ppm	ASTM D5185m >20	<1	5	<1
Water	%	ASTM D6304 >0.05	0.009	0.014	0.011
ppm Water	ppm	ASTM D6304 >500	91.0	145.3	118.6

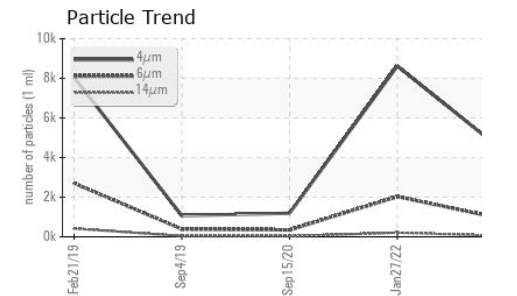
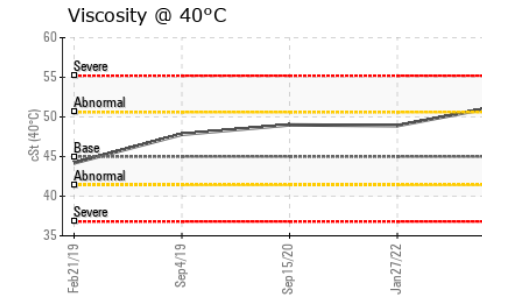
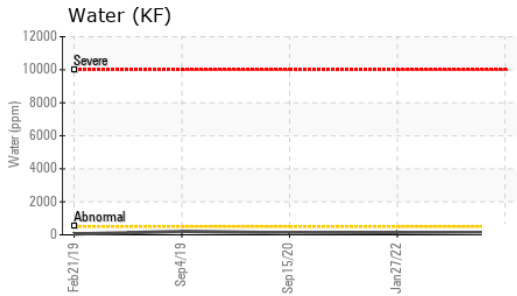
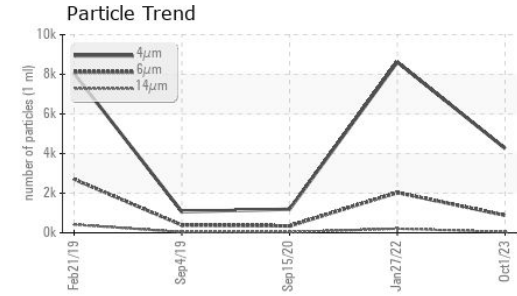
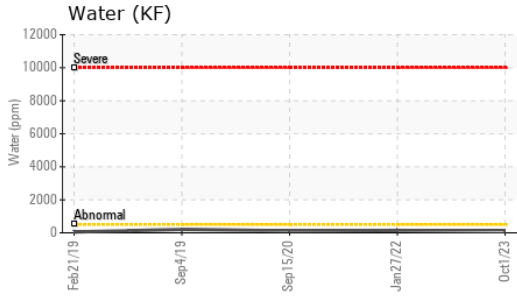
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		4257	8620	1190
Particles >6µm	ASTM D7647	>1300	880	▲ 2032	348
Particles >14µm	ASTM D7647	>80	41	▲ 208	32
Particles >21µm	ASTM D7647	>20	11	▲ 49	9
Particles >38µm	ASTM D7647	>4	1	▲ 6	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	19/17/13	▲ 18/15	16/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.45	0.40	0.454

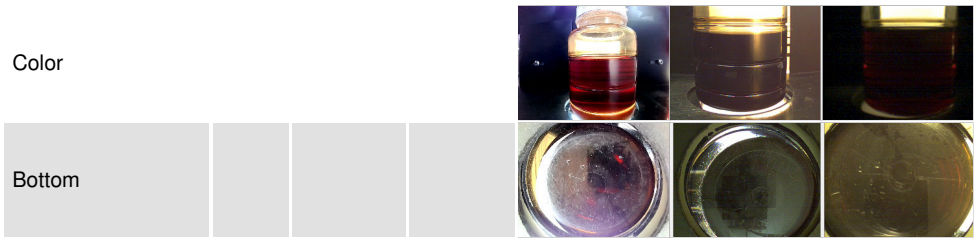
OIL ANALYSIS REPORT



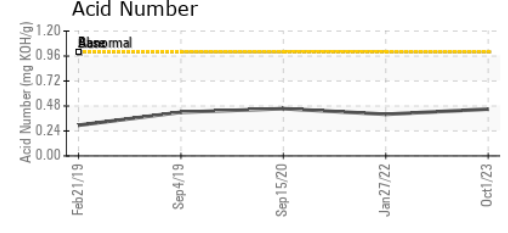
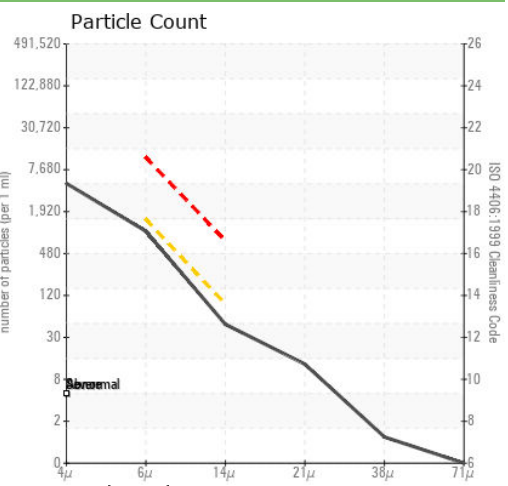
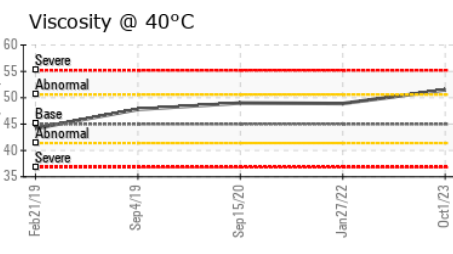
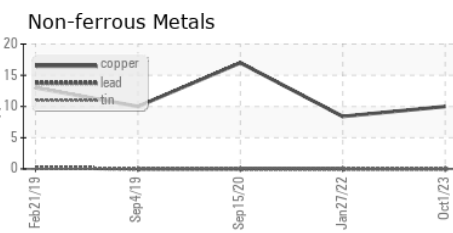
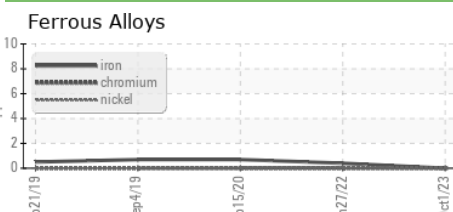
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	51.5	48.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA006233 **Received** : 02 Oct 2023
Lab Number : 05967029 **Diagnosed** : 04 Oct 2023
Unique Number : 10673580 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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 WESTBOROUGH, MA
 US 01531
 Contact: ROBERT BAEZ
 robert_n_baez@carmax.com
 T:
 F:

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)