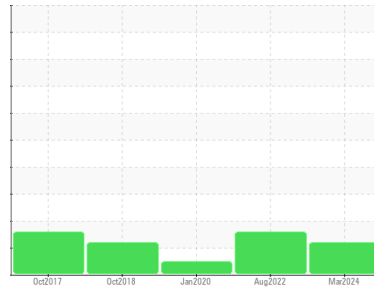




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER AS 20T 4772387 (S/N 1115)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

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.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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			KCPA013811	KCP30948	KCP22208
Sample Date	Client Info			22 Mar 2024	25 Aug 2022	08 Jan 2020
Machine Age	hrs	Client Info		58655	49525	28531
Oil Age	hrs	Client Info		9130	3000	357
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	NORMAL

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	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	6	<1
Copper	ppm	ASTM D5185m	>50	17	39	3
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

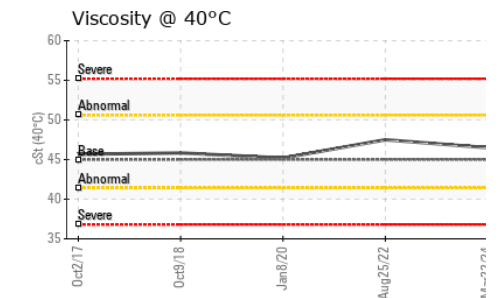
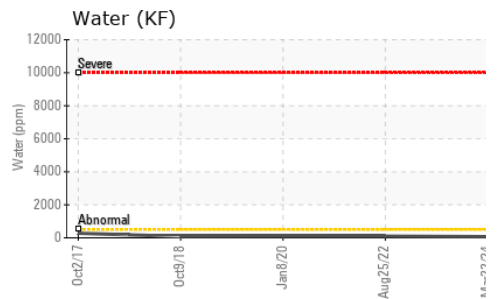
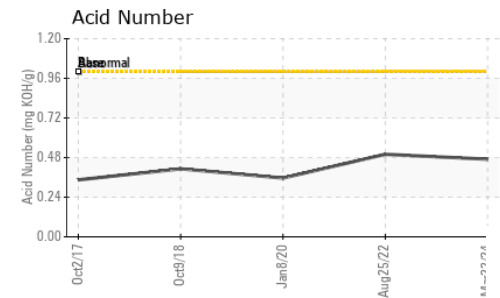
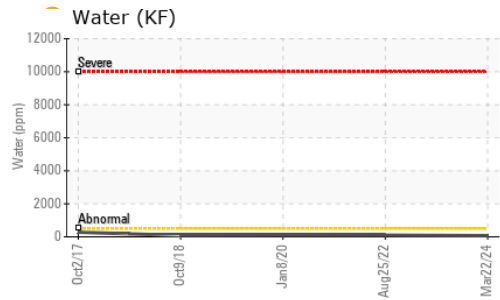
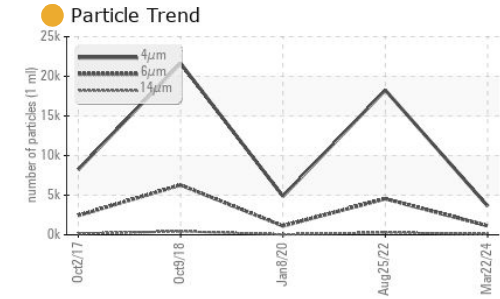
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	2	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	100	<1	<1	30
Calcium	ppm	ASTM D5185m	0	0	0	<1
Phosphorus	ppm	ASTM D5185m	0	0	15	<1
Zinc	ppm	ASTM D5185m	0	0	0	7
Sulfur	ppm	ASTM D5185m	23500	18640	21817	23625

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	2	2
Sodium	ppm	ASTM D5185m		2	1	8
Potassium	ppm	ASTM D5185m	>20	0	1	1
Water	%	ASTM D6304	>0.05	0.006	0.010	0.010
ppm Water	ppm	ASTM D6304	>500	68	100.1	103.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		3630	18259	4864
Particles >6µm		ASTM D7647	>1300	1136	▲ 4556	1115
Particles >14µm		ASTM D7647	>80	● 86	▲ 288	44
Particles >21µm		ASTM D7647	>20	● 23	▲ 80	10
Particles >38µm		ASTM D7647	>4	1	2	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● 19/17/14	▲ 21/19/15	17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.47	0.50	0.356

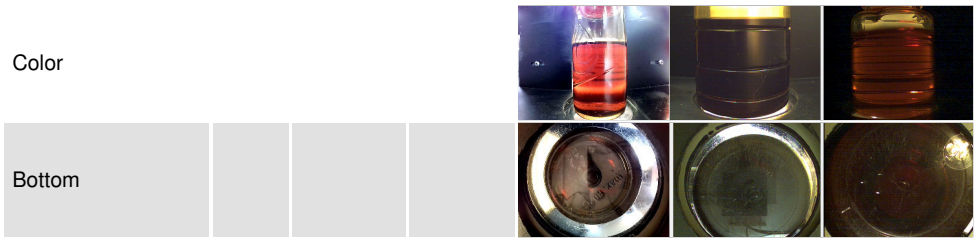
OIL ANALYSIS REPORT



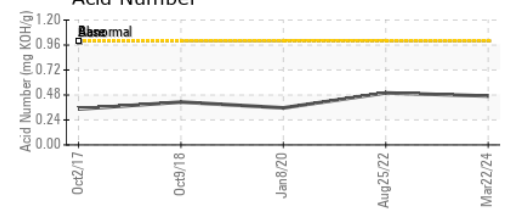
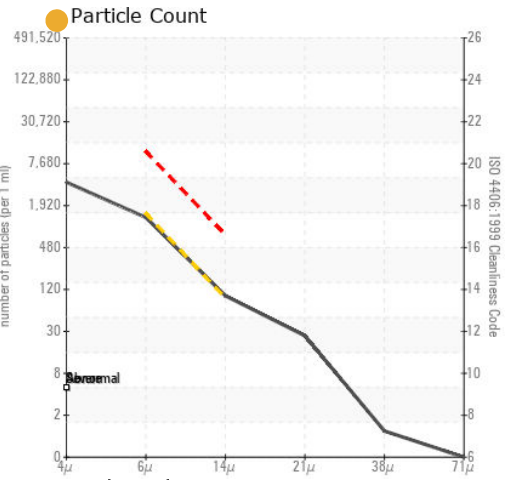
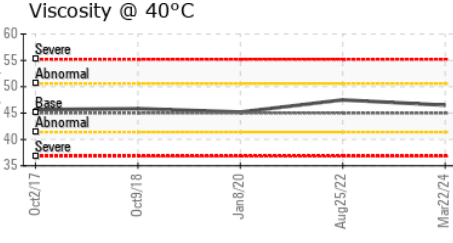
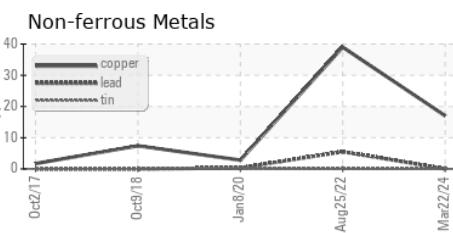
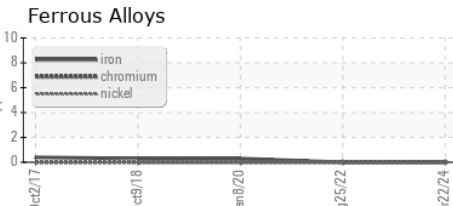
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.5	47.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013811
Lab Number : 06149517
Unique Number : 10979595
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 2024 - Don Baldrige

CARMAX
 7700 MATAPEAKE BUSINESS DR
 BRANDYWINE, MD
 US 20613
 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)