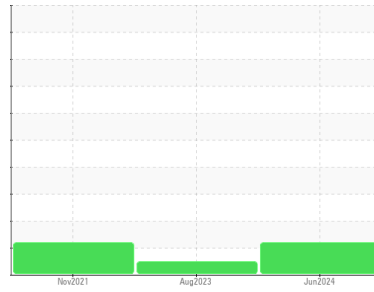




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER 5036175

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			KCPA017475	KCPA003570	KCP38831
Sample Date	Client Info			19 Jun 2024	17 Aug 2023	04 Nov 2021
Machine Age	hrs	Client Info		51004	36443	33039
Oil Age	hrs	Client Info		3000	0	5009
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				ATTENTION	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	3	<1	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	2	2	4
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

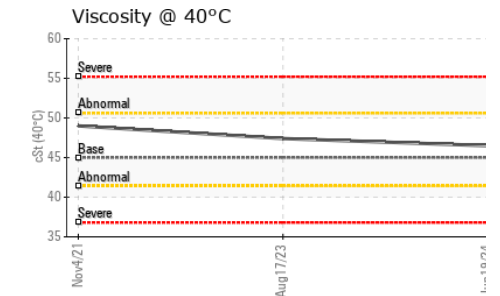
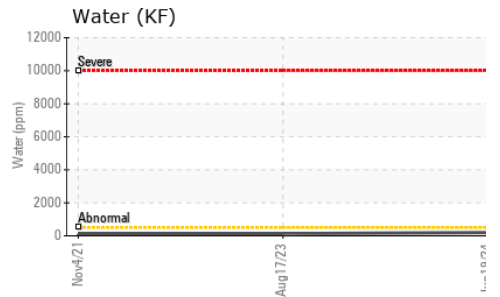
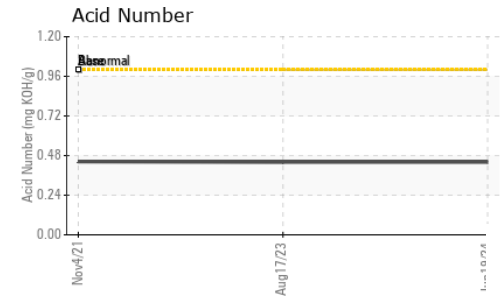
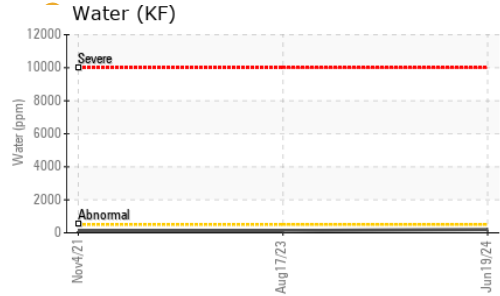
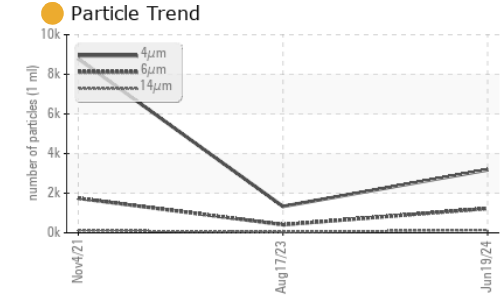
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	12	0	16
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	100	56	38	26
Calcium	ppm	ASTM D5185m	0	0	3	0
Phosphorus	ppm	ASTM D5185m	0	15	3	0
Zinc	ppm	ASTM D5185m	0	20	23	22
Sulfur	ppm	ASTM D5185m	23500	20493	21701	17018

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	6	0
Sodium	ppm	ASTM D5185m		11	13	12
Potassium	ppm	ASTM D5185m	>20	3	1	0
Water	%	ASTM D6304	>0.05	0.020	0.012	0.012
ppm Water	ppm	ASTM D6304	>500	205	126.0	128.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		3178	1333	8783
Particles >6µm		ASTM D7647	>1300	1229	409	1744
Particles >14µm		ASTM D7647	>80	137	37	116
Particles >21µm		ASTM D7647	>20	27	10	28
Particles >38µm		ASTM D7647	>4	0	0	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	19/17/14	18/16/12	18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.44	0.44	0.443

OIL ANALYSIS REPORT

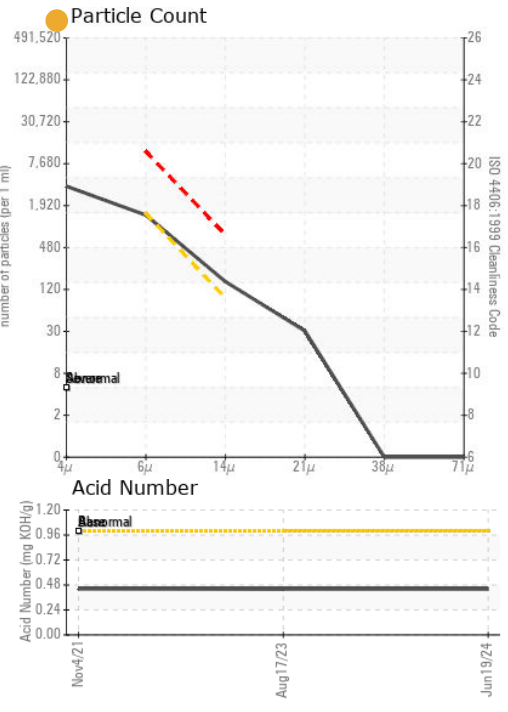
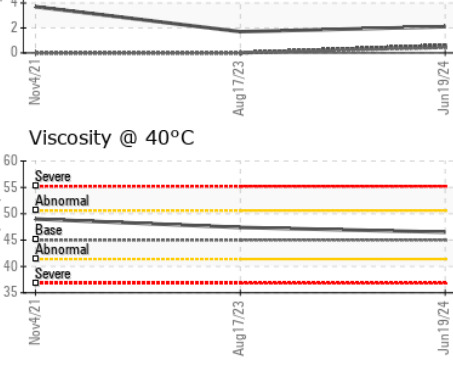
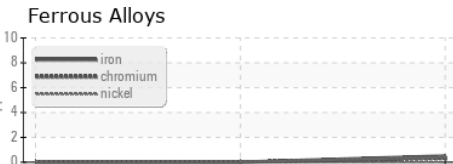


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.4	49.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017475
Lab Number : 06218760
Unique Number : 11096957
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldrige

CARMAX 07280 - RENO
 35 AUTO CENTER DR
 RENO, NV
 US 89511
 Contact: WENDY SITKA
 wendy_m_sitka@carmax.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)