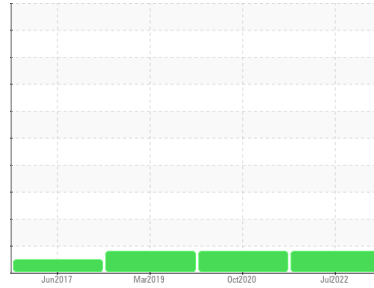




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER AS 25T 5624996 (S/N 1284)

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

DIAGNOSIS

Recommendation

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 silt (particulates < 14 microns in size) 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	KCP479710	KCP29448	KCP16860
Sample Date	Client Info	11 Jul 2022	20 Oct 2020	26 Mar 2019
Machine Age	hrs	15538	9070	3095
Oil Age	hrs	5468	5380	3020
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ATTENTION	ABNORMAL	ATTENTION

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	▲ 5	<1
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	<1	<1	0
Copper	ppm	ASTM D5185m >50	16	23	4
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	2	<1
Barium	ppm	ASTM D5185m 90	0	0	14
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 100	8	11	56
Calcium	ppm	ASTM D5185m 0	0	1	<1
Phosphorus	ppm	ASTM D5185m 0	3	4	2
Zinc	ppm	ASTM D5185m 0	55	44	10
Sulfur	ppm	ASTM D5185m 23500	18303	18033	17008

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	<1	<1
Sodium	ppm	ASTM D5185m	0	2	15
Potassium	ppm	ASTM D5185m >20	1	<1	1
Water	%	ASTM D6304 >0.05	0.016	0.013	0.015
ppm Water	ppm	ASTM D6304 >500	160.0	131.3	150

FLUID CLEANLINESS

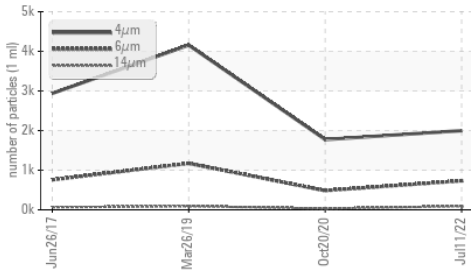
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	1998	1773	4156
Particles >6µm	ASTM D7647 >1300	731	484	1173
Particles >14µm	ASTM D7647 >80	▲ 91	31	▲ 92
Particles >21µm	ASTM D7647 >20	19	6	▲ 23
Particles >38µm	ASTM D7647 >4	1	1	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 18/17/14	16/12	▲ 17/14

FLUID DEGRADATION

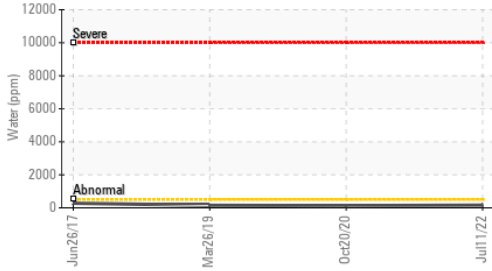
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.39	0.369	0.376

OIL ANALYSIS REPORT

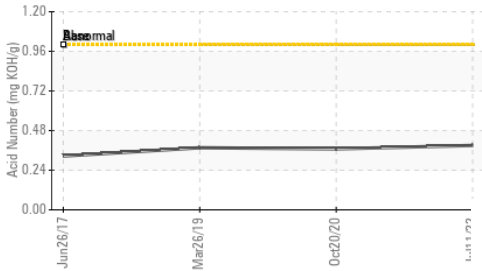
Particle Trend



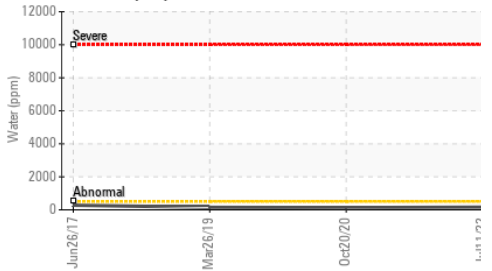
Water (KF)



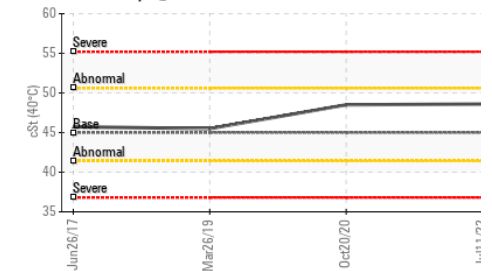
Acid Number



Water (KF)



Viscosity @ 40°C



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	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

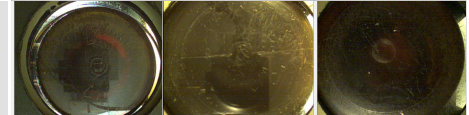
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	48.6	48.5	45.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

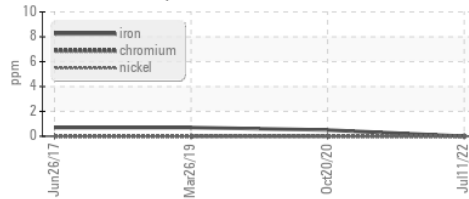


Bottom

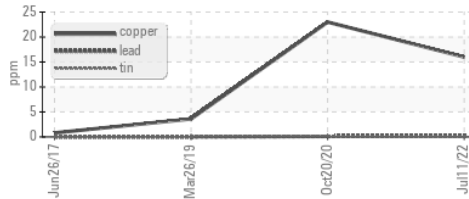


GRAPHS

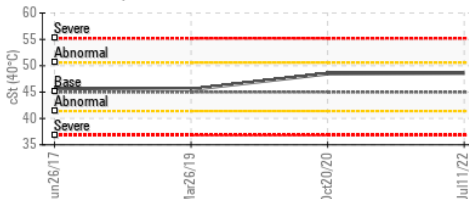
Ferrous Alloys



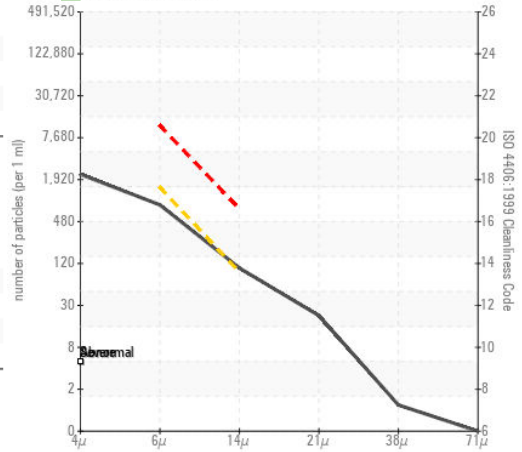
Non-ferrous Metals



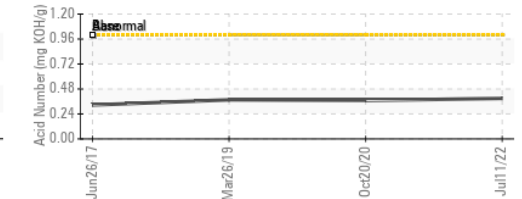
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP479710 **Received** : 18 Jul 2022
Lab Number : 05594301 **Diagnosed** : 19 Jul 2022
Unique Number : 10058781 **Diagnostician** : Angela Borella

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

CARMAX 6082

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