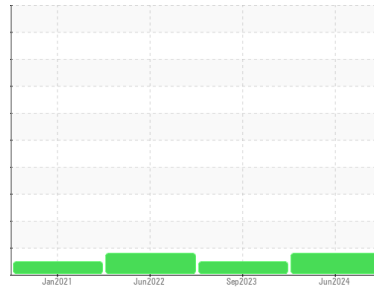




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

KAESER 2648044

Component

Compressor

Fluid

KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The aluminum level is abnormal. All other 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			KCPA014683	KCPA005604	KCP51357
Sample Date	Client Info			05 Jun 2024	02 Sep 2023	16 Jun 2022
Machine Age	hrs	Client Info		27233	7526	20215
Oil Age	hrs	Client Info		1000	0	3000
Oil Changed	Client Info			Not Chngd	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	8	<1	11
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	▲ 21	<1	▲ 19
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	2	2	1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m		---	---	---
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
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		0	2	2
Calcium	ppm	ASTM D5185m		0	1	0
Phosphorus	ppm	ASTM D5185m	500	512	0	430
Zinc	ppm	ASTM D5185m		216	105	256
Sulfur	ppm	ASTM D5185m		2059	1947	1979

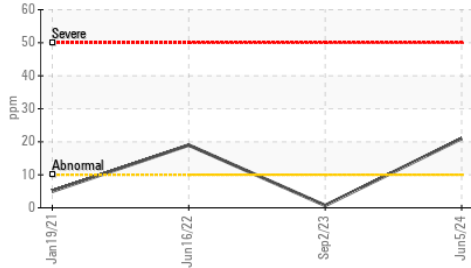
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Sodium	ppm	ASTM D5185m		1	1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	2
Water	%	ASTM D6304	>0.05	0.007	0.003	0.007
ppm Water	ppm	ASTM D6304	>500	71	37.4	71.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		389	5642	791
Particles >6µm		ASTM D7647	>1300	133	1070	205
Particles >14µm		ASTM D7647	>80	11	39	41
Particles >21µm		ASTM D7647	>20	2	5	15
Particles >38µm		ASTM D7647	>4	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	16/14/11	20/17/12	17/15/13

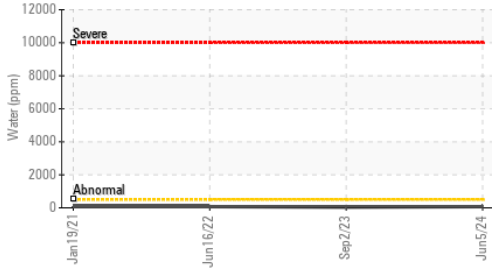
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	1.28	0.36	0.799

OIL ANALYSIS REPORT

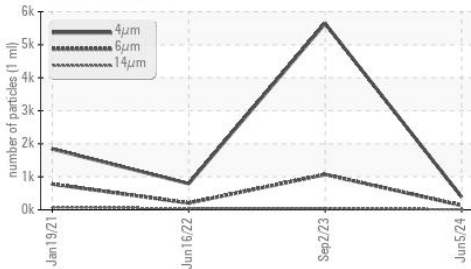
▲ Aluminum (ppm)



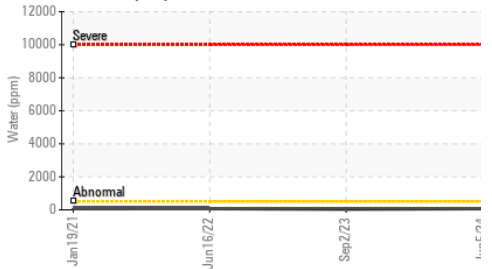
Water (KF)



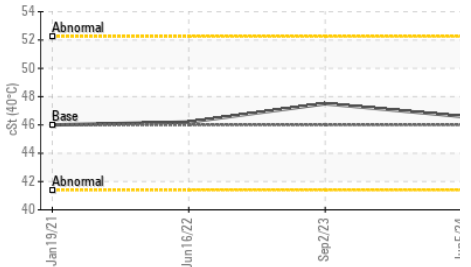
Particle Trend



Water (KF)



Viscosity @ 40°C

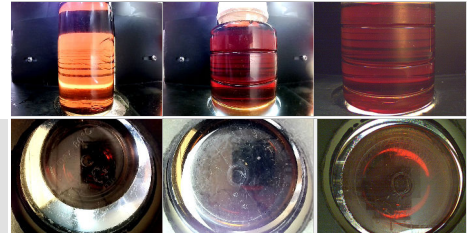


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	46.6	47.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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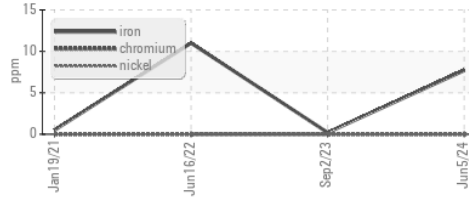
Color



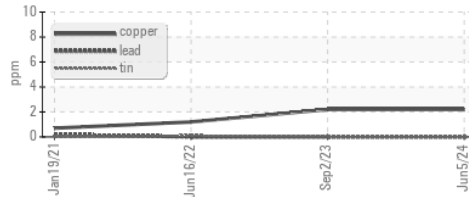
Bottom

GRAPHS

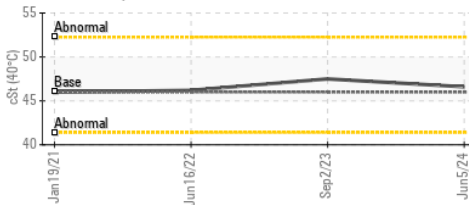
Ferrous Alloys



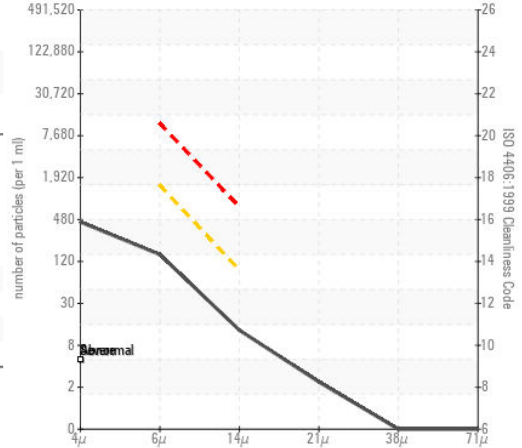
Non-ferrous Metals



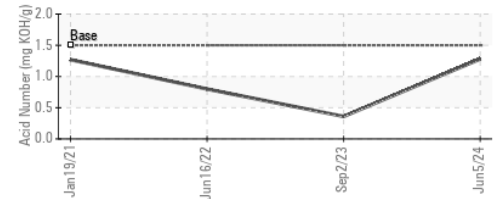
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA014683 **Received** : 10 Jun 2024
Lab Number : 06205421 **Tested** : 13 Jun 2024
Unique Number : 11072882 **Diagnosed** : 13 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CONTINENTAL MILLS
 1200 STEVENS AVE
 EFFINGHAM, IL
 US 62401
 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)

T:
F: