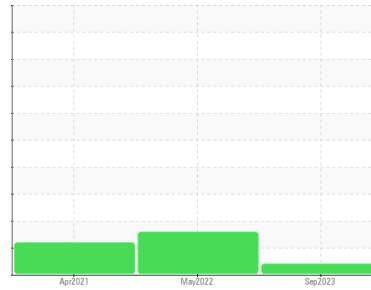


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
KAESER 6559058

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

DIAGNOSIS

▲ Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

▲ Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA003648	KCP45531	KCP31814
Sample Date	Client Info		08 Sep 2023	02 May 2022	28 Apr 2021
Machine Age	hrs	Client Info	23488	13822	7785
Oil Age	hrs	Client Info	0	0	7785
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	2
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	<1	<1
Aluminum	ppm	ASTM D5185m >10	0	<1	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	10	10	14
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	<1
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 100	0	11	7
Calcium	ppm	ASTM D5185m 0	0	<1	0
Phosphorus	ppm	ASTM D5185m 0	0	6	0
Zinc	ppm	ASTM D5185m 0	0	50	48
Sulfur	ppm	ASTM D5185m 23500	17258	17095	16381

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	1	18	<1
Sodium	ppm	ASTM D5185m	<1	2	3
Potassium	ppm	ASTM D5185m >20	0	<1	6
Water	%	ASTM D6304 >0.05	0.006	0.009	0.016
ppm Water	ppm	ASTM D6304 >500	69	95.4	167.2

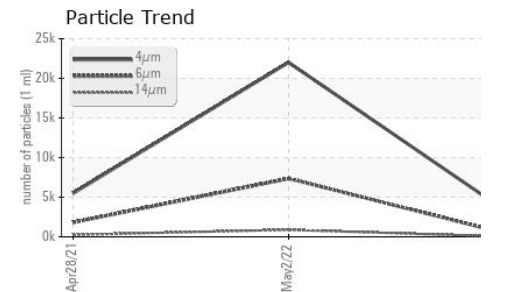
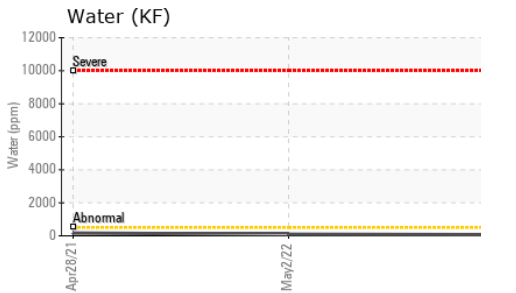
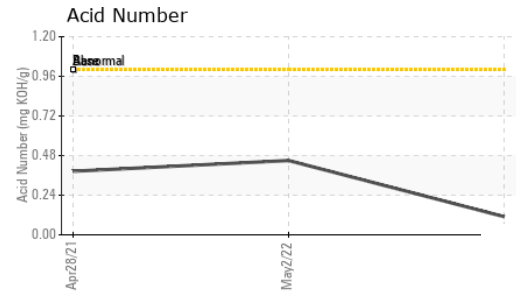
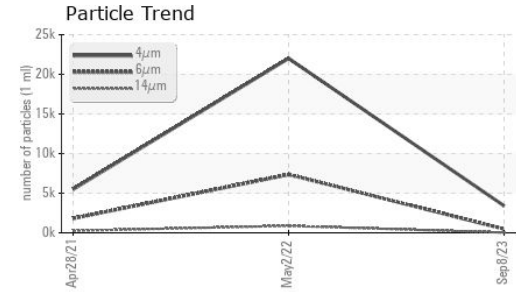
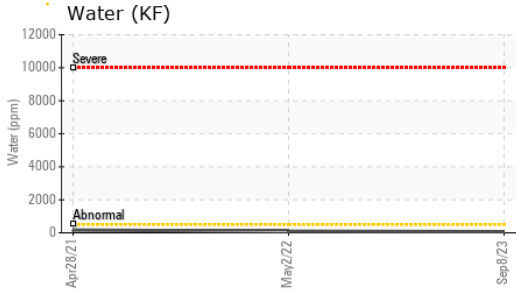
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		3403	22009	5489
Particles >6µm	ASTM D7647	>1300	477	▲ 7354	▲ 1815
Particles >14µm	ASTM D7647	>80	26	▲ 882	▲ 247
Particles >21µm	ASTM D7647	>20	7	▲ 276	▲ 71
Particles >38µm	ASTM D7647	>4	0	▲ 7	3
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	19/16/12	▲ 20/17	▲ 18/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.11	0.45	0.385

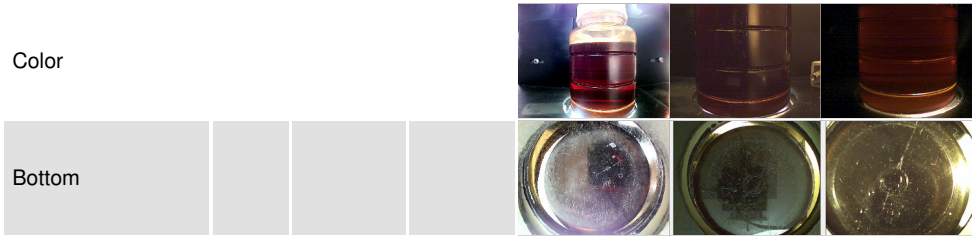
OIL ANALYSIS REPORT



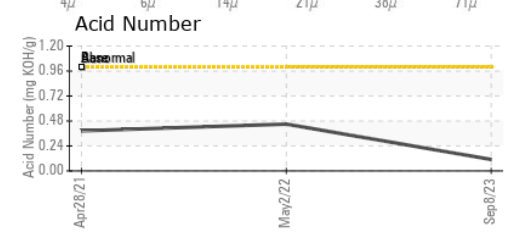
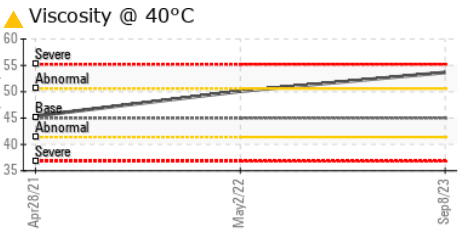
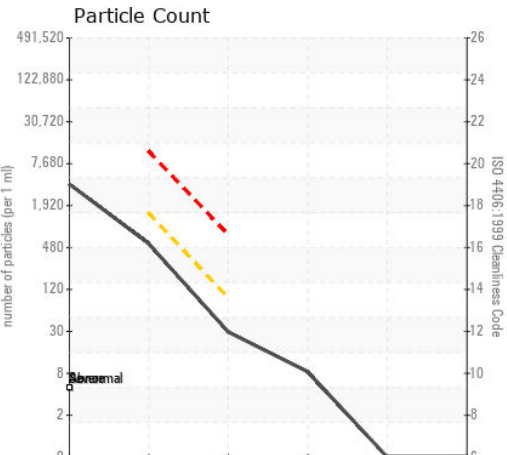
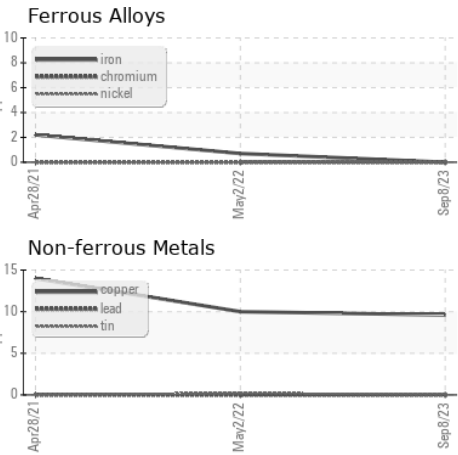
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 ▲ 53.66	50.1	45.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA003648 **Received** : 30 Jan 2024
Lab Number : 06073905 **Diagnosed** : 02 Feb 2024
Unique Number : 10855996 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ALAMEDA COUNTY INDUSTRIES
 610 ALADDIN AVE
 SAN LEANDRO, CA
 US 94577
 Contact: R. POLLARD
 rpollard@alamedacountyindustries.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)