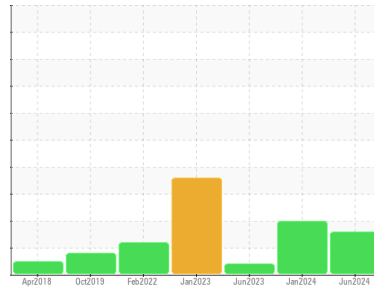




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SM 10 A/C 5367794 (S/N 2025)
 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 high 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			KCPA019368	KCPA011935	KCPA002078
Sample Date	Client Info			20 Jun 2024	03 Jan 2024	19 Jun 2023
Machine Age	hrs	Client Info		19400	18141	15541
Oil Age	hrs	Client Info		3860	0	0
Oil Changed	Client Info			Changed	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

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	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	2	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	7	10
Tin	ppm	ASTM D5185m	>10	0	2	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

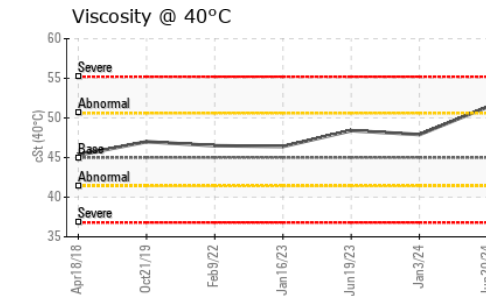
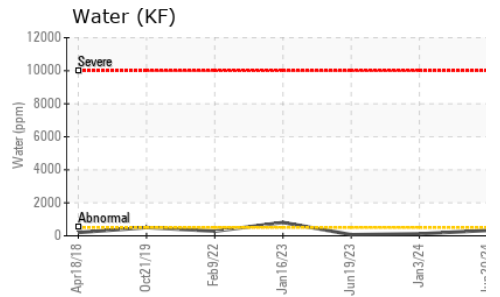
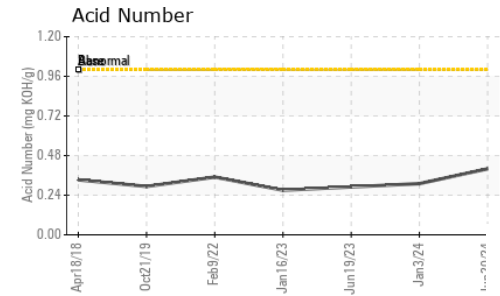
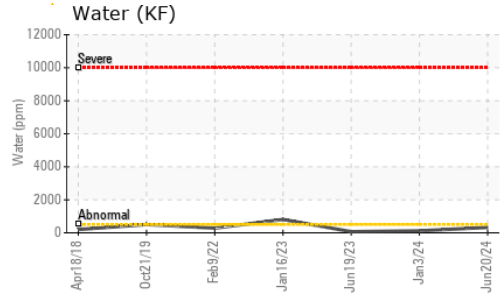
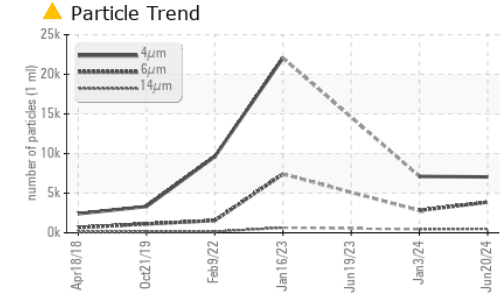
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	2	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	100	71	39	12
Calcium	ppm	ASTM D5185m	0	7	0	0
Phosphorus	ppm	ASTM D5185m	0	4	9	<1
Zinc	ppm	ASTM D5185m	0	12	39	27
Sulfur	ppm	ASTM D5185m	23500	22270	27595	23013

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Sodium	ppm	ASTM D5185m		15	13	5
Potassium	ppm	ASTM D5185m	>20	3	3	3
Water	%	ASTM D6304	>0.05	0.032	0.012	0.006
ppm Water	ppm	ASTM D6304	>500	328	121	69.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7053	7122	---
Particles >6µm		ASTM D7647	>1300	▲ 3861	▲ 2821	---
Particles >14µm		ASTM D7647	>80	▲ 489	▲ 432	---
Particles >21µm		ASTM D7647	>20	▲ 100	▲ 149	---
Particles >38µm		ASTM D7647	>4	3	▲ 12	---
Particles >71µm		ASTM D7647	>3	0	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 20/19/16	▲ 20/19/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.40	0.31	0.29

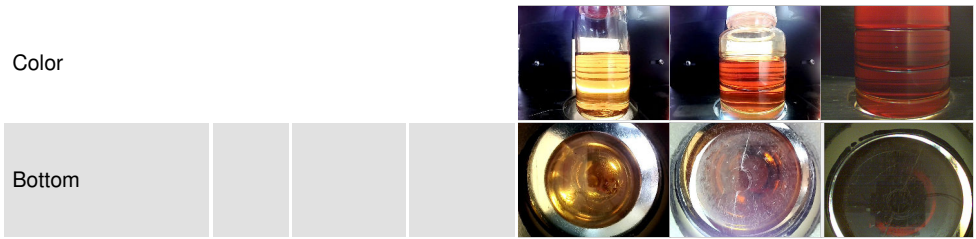
OIL ANALYSIS REPORT



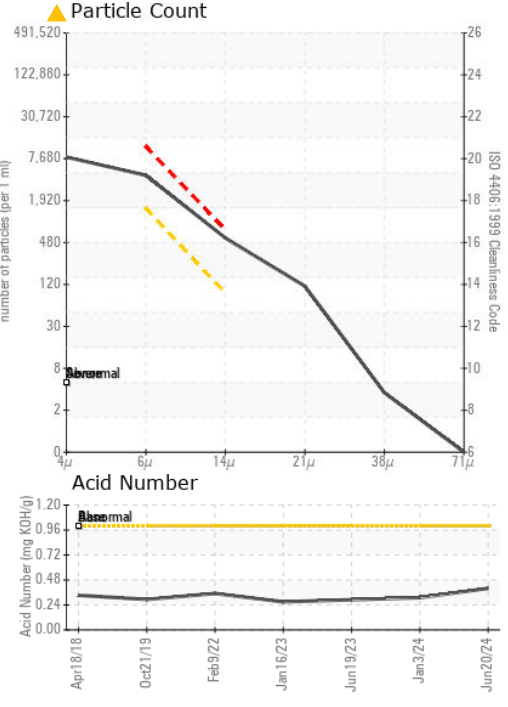
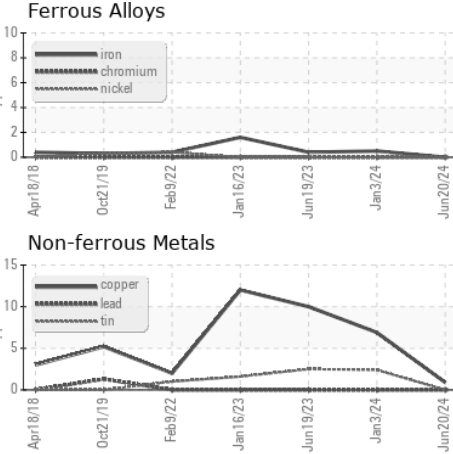
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	51.4	47.9	48.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA019368 **Received** : 25 Jun 2024
Lab Number : 06220364 **Tested** : 26 Jun 2024
Unique Number : 11098561 **Diagnosed** : 27 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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 LOUISVILLE, KY
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 kaubin@alro.com
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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)