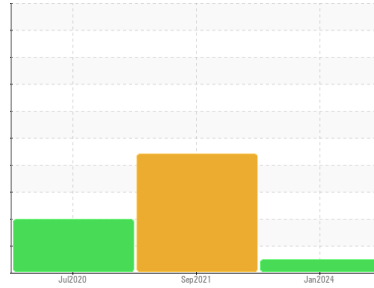




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER SM 7.5 6769387 (S/N 1033)

Component
Compressor

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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		KCPA011664	KCP36449	KCP10545
Sample Date	Client Info		04 Jan 2024	07 Sep 2021	10 Jul 2020
Machine Age	hrs	Client Info	6114	3294	1560
Oil Age	hrs	Client Info	0	0	1560
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	<1	2
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	2	3	0
Lead	ppm	ASTM D5185m >10	<1	3	1
Copper	ppm	ASTM D5185m >50	2	4	2
Tin	ppm	ASTM D5185m >10	<1	0	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	1	0
Barium	ppm	ASTM D5185m 90	<1	<1	<1
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 100	63	44	67
Calcium	ppm	ASTM D5185m 0	1	3	2
Phosphorus	ppm	ASTM D5185m 0	26	6	11
Zinc	ppm	ASTM D5185m 0	13	14	0
Sulfur	ppm	ASTM D5185m 23500	20774	17157	15496

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	1	4
Sodium	ppm	ASTM D5185m	12	3	15
Potassium	ppm	ASTM D5185m >20	3	<1	2
Water	%	ASTM D6304 >0.05	0.015	▲ 0.396	0.033
ppm Water	ppm	ASTM D6304 >500	154	▲ 3960	337.6

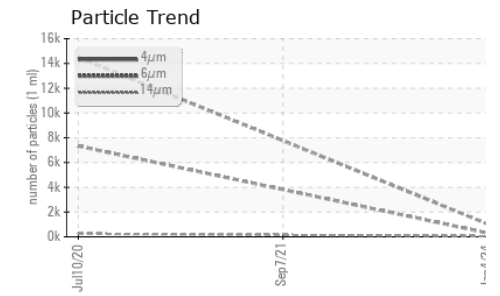
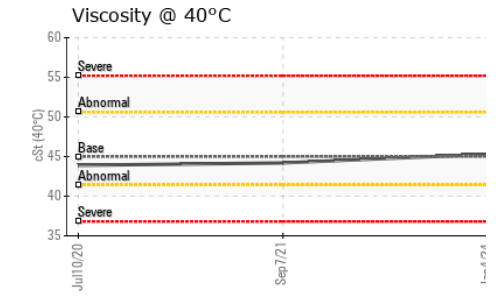
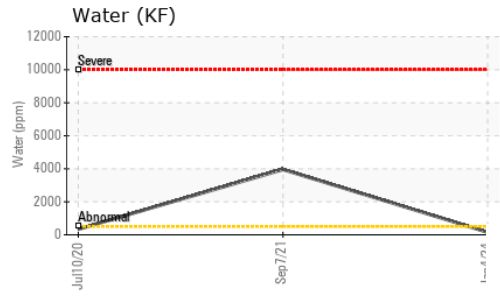
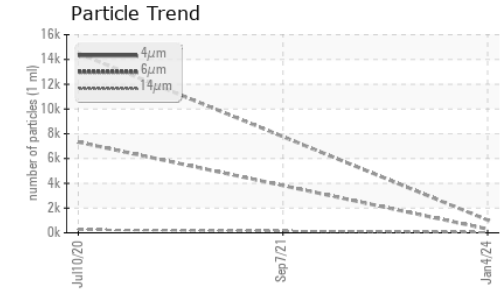
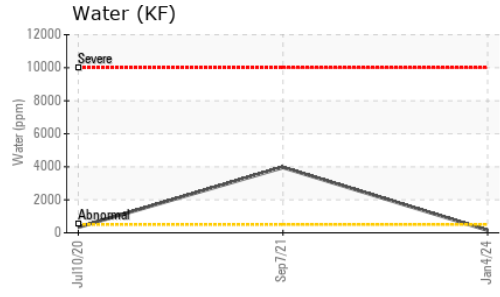
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		1032	---	14504
Particles >6µm	ASTM D7647 >1300		302	---	▲ 7330
Particles >14µm	ASTM D7647 >80		42	---	▲ 251
Particles >21µm	ASTM D7647 >20		16	---	▲ 36
Particles >38µm	ASTM D7647 >4		1	---	▲ 10
Particles >71µm	ASTM D7647 >3		0	---	▲ 10
Oil Cleanliness	ISO 4406 (c) >17/13		15/13	---	▲ 20/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.31	0.320	0.321

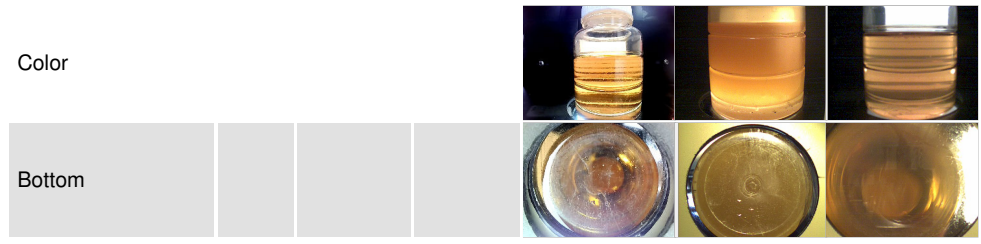
OIL ANALYSIS REPORT



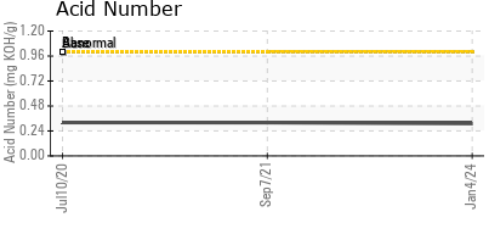
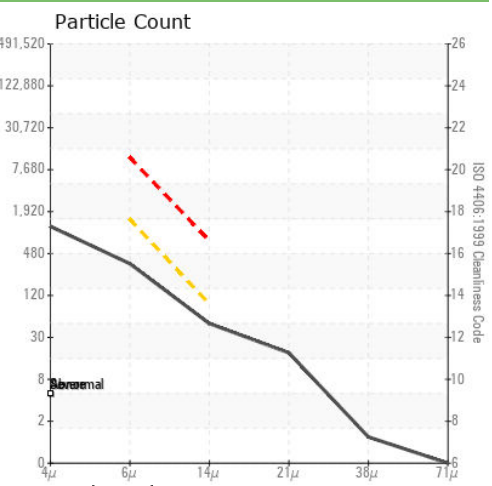
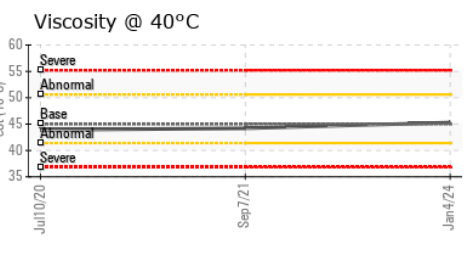
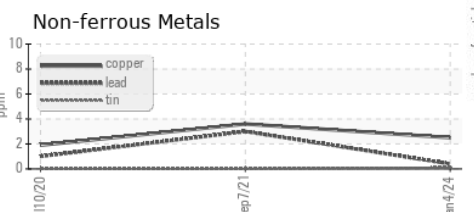
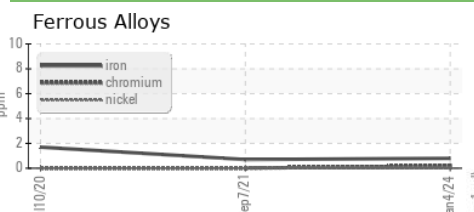
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		▲ 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	45.3	44.2	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA011664 **Received** : 18 Jan 2024
Lab Number : 06065030 **Tested** : 07 Feb 2024
Unique Number : 10836412 **Diagnosed** : 07 Feb 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

KRAMERS CUSTOM KITCHENS
 1278 WASHINGTON ST
 HOLLISTON, MA
 US 01746
 Contact: SERVICE MANAGER
 rossini3@verizon.net

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)