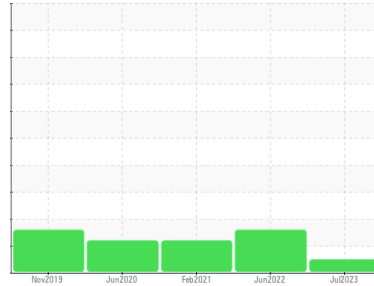




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER SFC 45ST 6813240 (S/N 5062)

Component
Compressor

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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		KCPA004419	KCP51270	KCP32555
Sample Date	Client Info		24 Jul 2023	03 Jun 2022	10 Feb 2021
Machine Age	hrs	Client Info	21603	16691	9713
Oil Age	hrs	Client Info	0	6978	6754
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	0	<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	<1	<1
Aluminum	ppm	ASTM D5185m >10	0	<1	0
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	7	8	2
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	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m 90	0	0	4
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 90	<1	<1	55
Calcium	ppm	ASTM D5185m 2	0	0	<1
Phosphorus	ppm	ASTM D5185m	3	4	3
Zinc	ppm	ASTM D5185m	0	<1	2
Sulfur	ppm	ASTM D5185m	20356	15465	16441

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	0	<1
Sodium	ppm	ASTM D5185m	0	<1	32
Potassium	ppm	ASTM D5185m >20	0	0	10
Water	%	ASTM D6304 >0.05	0.008	0.005	0.007
ppm Water	ppm	ASTM D6304 >500	83.1	55.5	72.4

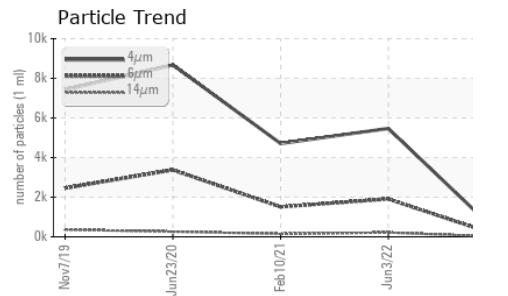
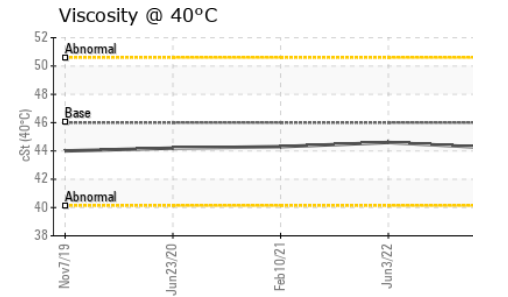
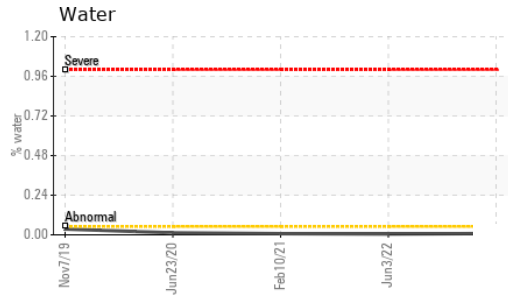
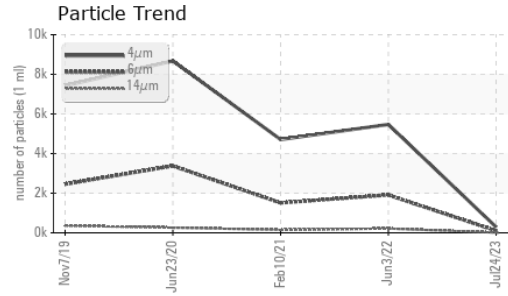
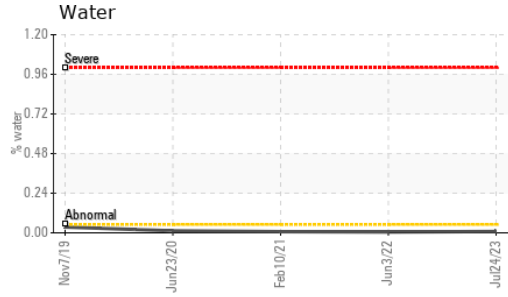
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		291	5470	4710
Particles >6µm	ASTM D7647 >1300		105	▲ 1909	▲ 1509
Particles >14µm	ASTM D7647 >80		11	▲ 216	▲ 146
Particles >21µm	ASTM D7647 >20		3	▲ 41	▲ 35
Particles >38µm	ASTM D7647 >4		1	3	2
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		15/14/11	▲ 20/18/15	▲ 18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.48	0.41	0.483

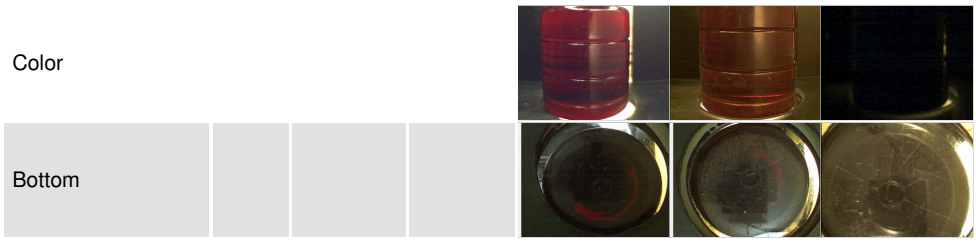
OIL ANALYSIS REPORT



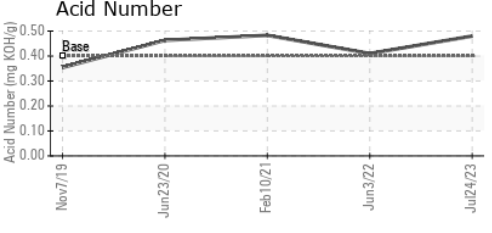
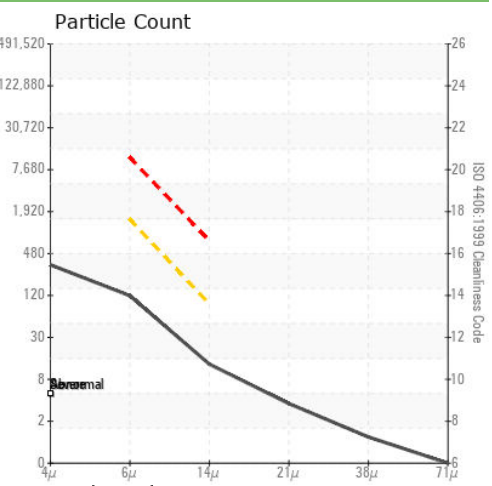
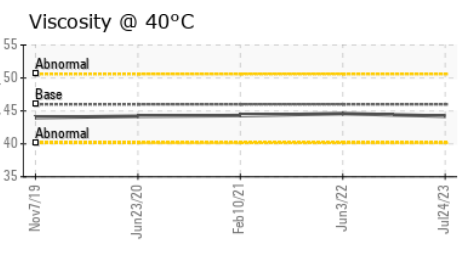
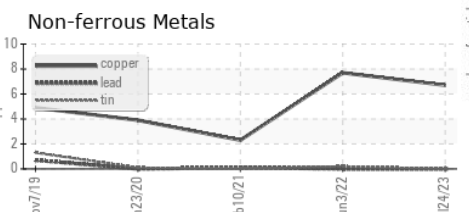
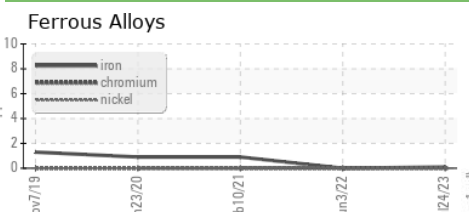
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.2	44.6	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004419 **Received** : 14 Aug 2023
Lab Number : 05924335 **Diagnosed** : 16 Aug 2023
Unique Number : 10604282 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

DOOR ENGINEERING
 101 POWER DR
 MANKATO, MN
 US 56001
 Contact: Service Manager

Certificate L2367
 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)

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