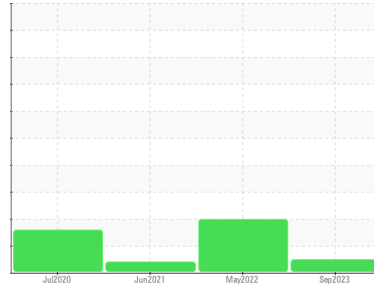




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER SK 20 6691993 (S/N 1226)

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

DIAGNOSIS

Recommendation

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

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA000724	KCP49544	KCP33256
Sample Date	Client Info		14 Sep 2023	26 May 2022	28 Jun 2021
Machine Age	hrs	Client Info	16309	12296	9846
Oil Age	hrs	Client Info	0	1891	4400
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	2	0
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	<1
Aluminum	ppm	ASTM D5185m >10	0	1	0
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	13	5	14
Tin	ppm	ASTM D5185m >10	<1	0	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	<1
Barium	ppm	ASTM D5185m 90	0	25	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	<1	44	<1
Calcium	ppm	ASTM D5185m 0	<1	0	0
Phosphorus	ppm	ASTM D5185m 0	3	12	5
Zinc	ppm	ASTM D5185m 0	0	10	0
Sulfur	ppm	ASTM D5185m 23500	18970	19143	15568

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	1
Sodium	ppm	ASTM D5185m	3	9	0
Potassium	ppm	ASTM D5185m >20	<1	0	0
Water	%	ASTM D6304 >0.05	0.001	0.022	0.009
ppm Water	ppm	ASTM D6304 >500	6.9	224.9	95.2

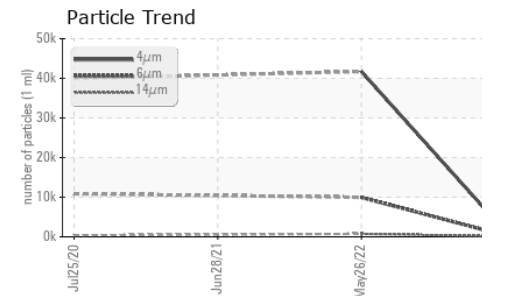
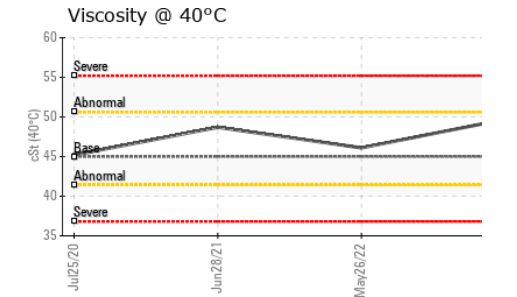
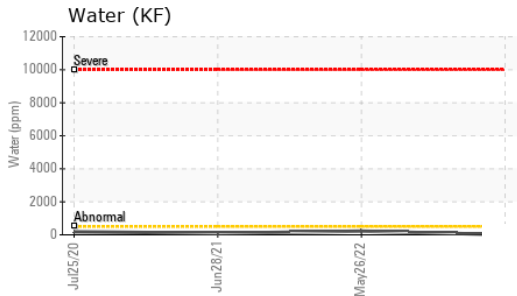
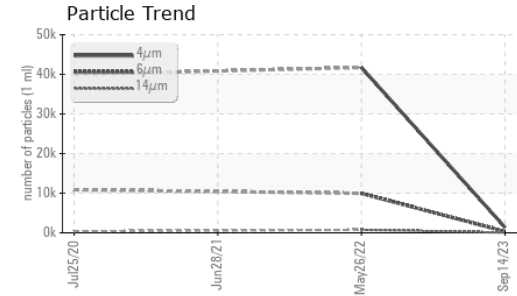
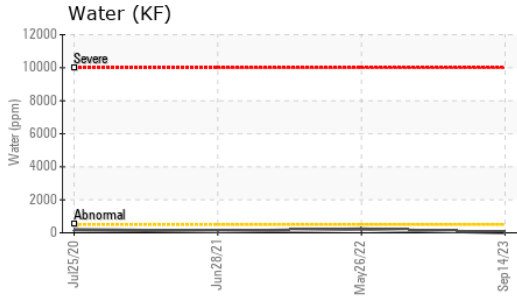
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		1364	41717	---
Particles >6µm	ASTM D7647 >1300		316	▲ 9958	---
Particles >14µm	ASTM D7647 >80		35	▲ 753	---
Particles >21µm	ASTM D7647 >20		16	▲ 209	---
Particles >38µm	ASTM D7647 >4		3	▲ 9	---
Particles >71µm	ASTM D7647 >3		1	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13		18/15/12	▲ 23/20/17	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.34	0.43	0.362

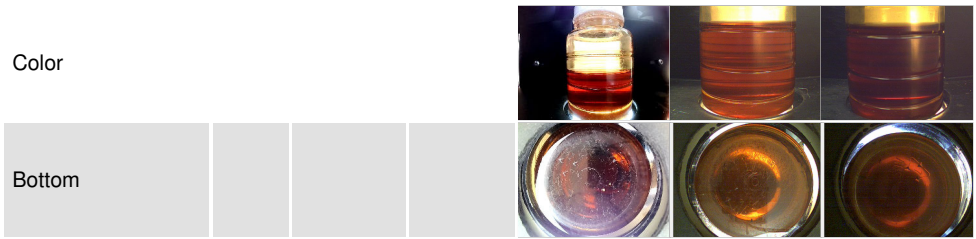
OIL ANALYSIS REPORT



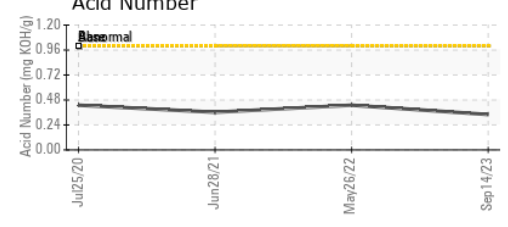
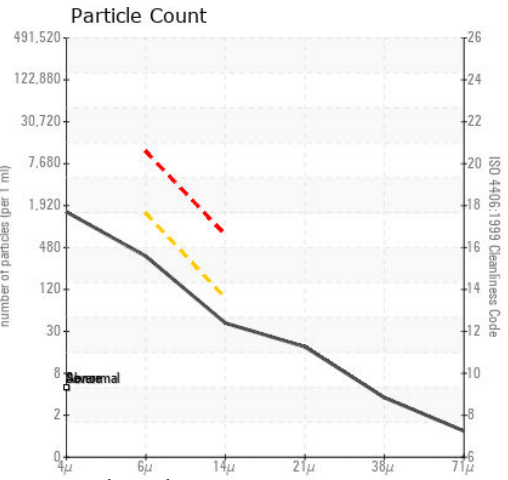
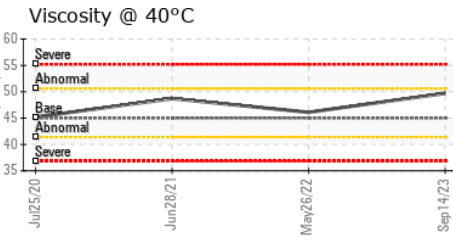
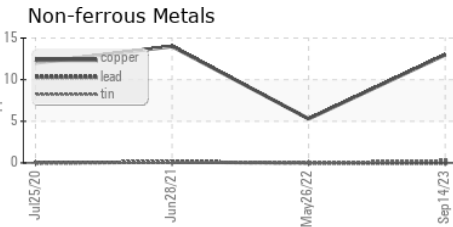
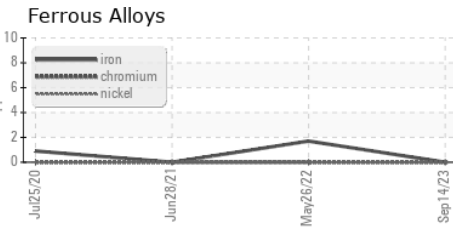
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	49.7	46.1	48.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA000724 **Received** : 25 Sep 2023
Lab Number : 05960622 **Diagnosed** : 27 Sep 2023
Unique Number : 10661835 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

HOME FOOD SERVICE
 2092 FARRAGUT AVE
 BRISTOL, PA
 US 19007
 Contact:

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: