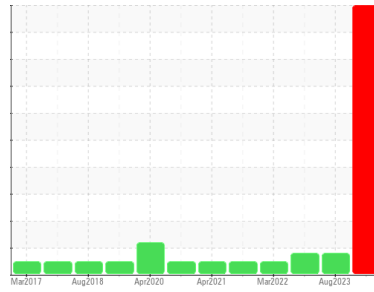


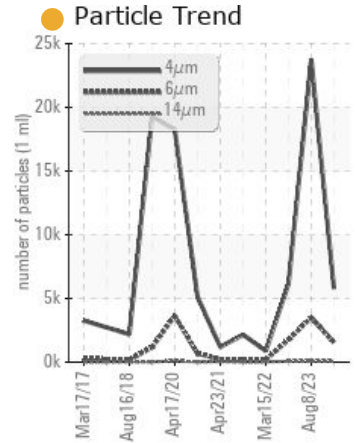
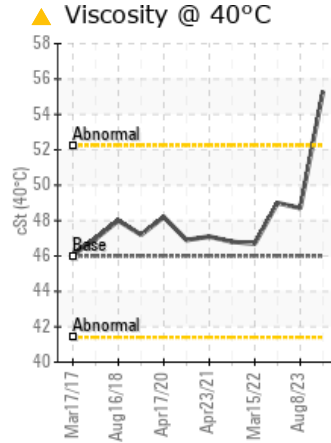
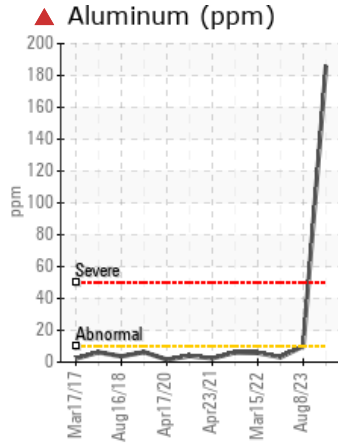
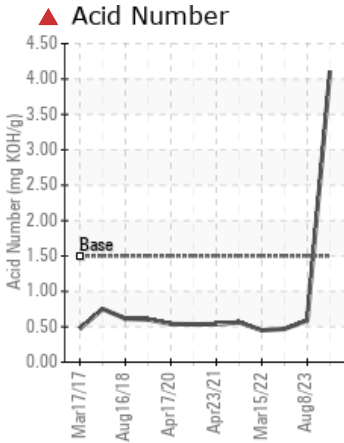
PROBLEM SUMMARY

Machine Id
KAESER SFC 90S 5785548 (S/N 1166)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ATTENTION
Aluminum	ppm	ASTM D5185m	>10	▲ 186	10	3
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	▲ 4.11	0.59	0.47
Visc @ 40°C	cSt	ASTM D445	46	▲ 55.3	48.7	49.0

Customer Id: RINVALGA
 Sample No.: KCPA012590
 Lab Number: 06218795
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Check For Overheating	---	---	?	We advise that you check for a possible overheat condition.

HISTORICAL DIAGNOSIS



08 Aug 2023 Diag: Doug Bogart

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. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



03 Dec 2022 Diag: Jonathan Hester

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. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



15 Mar 2022 Diag: Jonathan Hester

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)

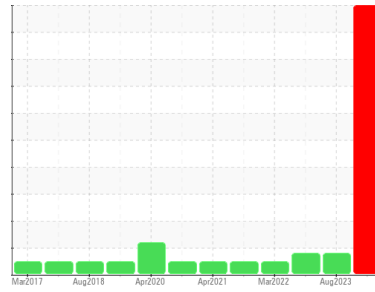




OIL ANALYSIS REPORT

Machine Id
KAESER SFC 90S 5785548 (S/N 1166)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

Sample Rating Trend



DIAGNOSIS

▲ Recommendation

We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample in 500 hours to monitor this condition.

▲ Wear

The aluminum level is severe.

● Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

▲ Fluid Condition

The AN level is above the recommended limit. The oil viscosity is higher than normal.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA012590	KCPA004664	KCP52688
Sample Date	Client Info		17 Jun 2024	08 Aug 2023	03 Dec 2022
Machine Age	hrs	Client Info	54160	46992	42067
Oil Age	hrs	Client Info	7000	0	5873
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			SEVERE	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	7	1	<1
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >10	▲ 186	10	3
Lead	ppm	ASTM D5185m >10	1	0	0
Copper	ppm	ASTM D5185m >50	15	2	2
Tin	ppm	ASTM D5185m >10	<1	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	0
Barium	ppm	ASTM D5185m	1	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	2	0	2
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m 500	191	17	31
Zinc	ppm	ASTM D5185m	15	10	0
Sulfur	ppm	ASTM D5185m	473	309	344

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	<1
Sodium	ppm	ASTM D5185m	6	2	2
Potassium	ppm	ASTM D5185m >20	6	2	0
Water	%	ASTM D6304 >0.05	0.028	0.009	0.004
ppm Water	ppm	ASTM D6304 >500	289	93.8	41.8

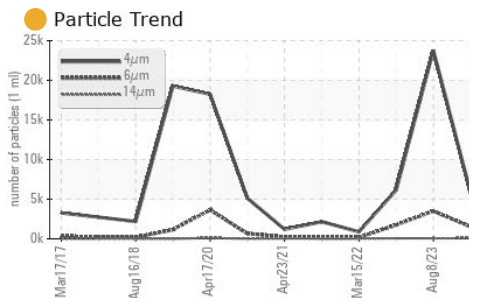
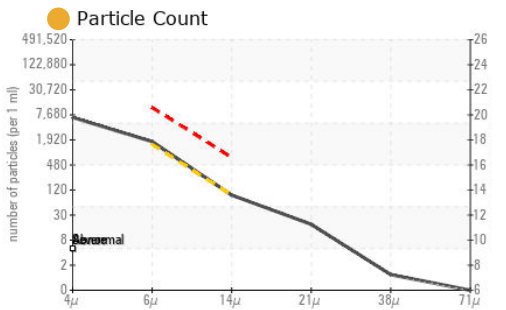
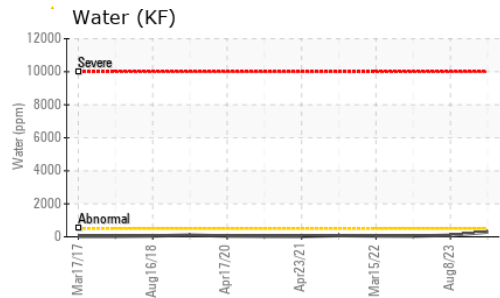
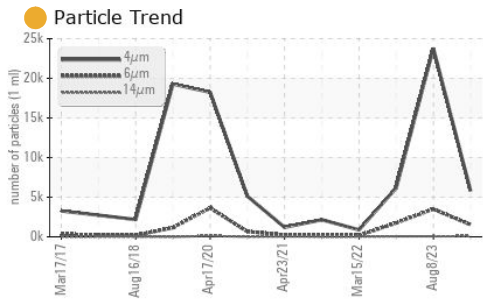
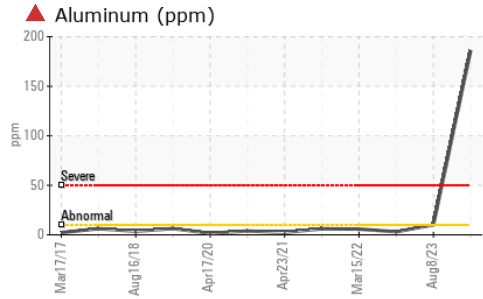
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5795	23771	6158
Particles >6µm	ASTM D7647 >1300		● 1534	▲ 3498	● 1747
Particles >14µm	ASTM D7647 >80		80	65	60
Particles >21µm	ASTM D7647 >20		16	14	7
Particles >38µm	ASTM D7647 >4		1	0	1
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		● 20/18/13	▲ 22/19/13	● 20/18/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	▲ 4.11	0.59	0.47

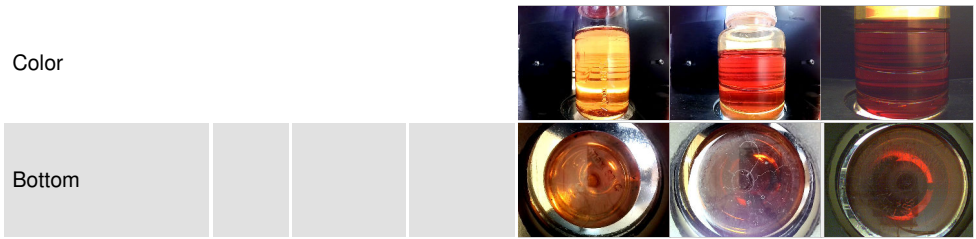
OIL ANALYSIS REPORT



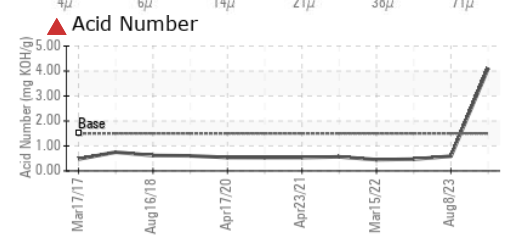
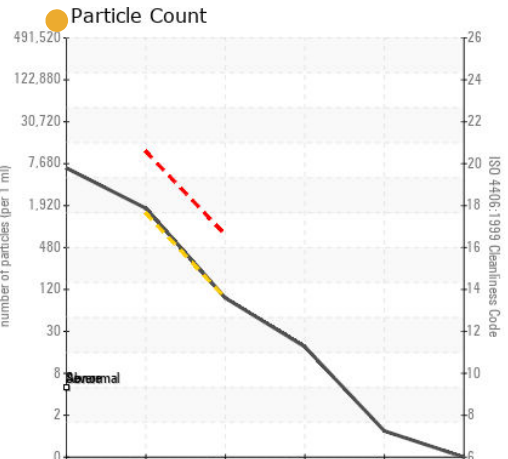
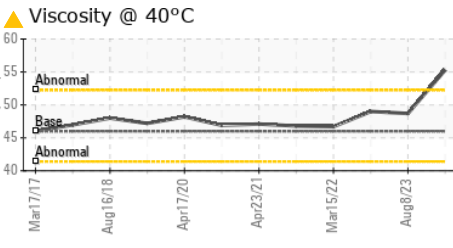
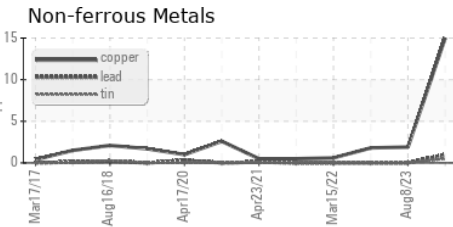
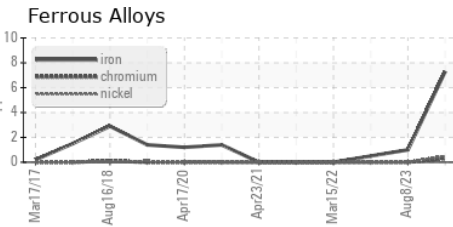
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	▲ 55.3	48.7	49.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA012590 **Received** : 24 Jun 2024
Lab Number : 06218795 **Tested** : 26 Jun 2024
Unique Number : 11096992 **Diagnosed** : 26 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

RING CAN CORPORATION
 1699 CLAY RD
 VALDOSTA, GA
 US 31601
 Contact: JIMMY GRIGGS
 jimmy.griggs@ringcontainer.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)