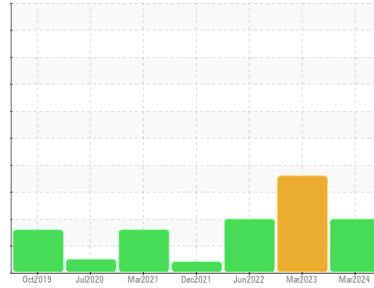




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SX 5 4478681 (S/N 1095)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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		KCPA016198	KCPA000207	KCP49555
Sample Date	Client Info		21 Mar 2024	06 Mar 2023	08 Jun 2022
Machine Age	hrs	Client Info	26506	25170	24174
Oil Age	hrs	Client Info	1329	0	122
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	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	0
Copper	ppm	ASTM D5185m >50	19	16	4
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
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	0
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 90	0	7	14
Calcium	ppm	ASTM D5185m 2	0	0	<1
Phosphorus	ppm	ASTM D5185m	0	0	6
Zinc	ppm	ASTM D5185m	0	62	53
Sulfur	ppm	ASTM D5185m	17844	19443	21008

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	<1	<1
Sodium	ppm	ASTM D5185m	0	1	6
Potassium	ppm	ASTM D5185m >20	0	0	<1
Water	%	ASTM D6304 >0.05	0.007	▲ 0.080	0.008
ppm Water	ppm	ASTM D6304 >500	78	▲ 800	88.3

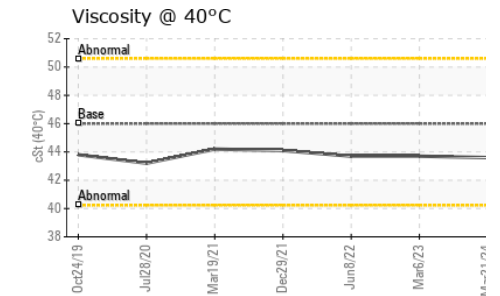
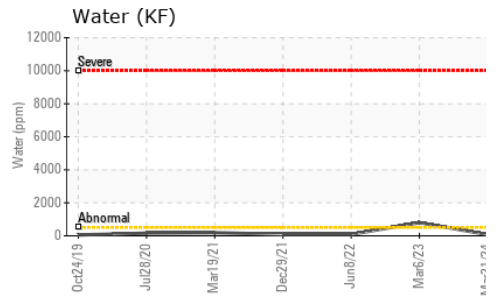
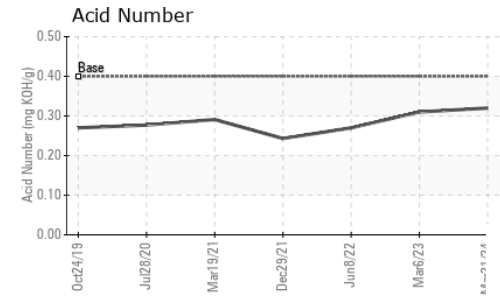
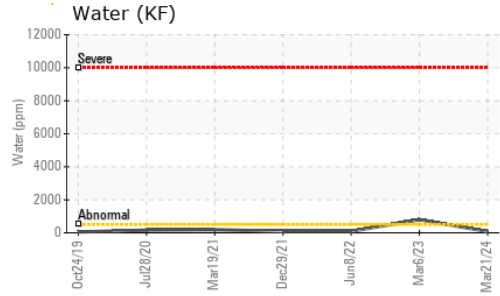
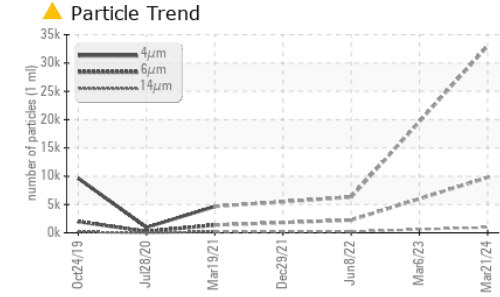
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		32994	---	▲ 6308
Particles >6µm	ASTM D7647	>1300	▲ 9778	---	▲ 2244
Particles >14µm	ASTM D7647	>80	▲ 958	---	▲ 218
Particles >21µm	ASTM D7647	>20	▲ 322	---	▲ 61
Particles >38µm	ASTM D7647	>4	▲ 23	---	4
Particles >71µm	ASTM D7647	>3	0	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 22/20/17	---	▲ 20/18/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.32	0.31	0.27

OIL ANALYSIS REPORT

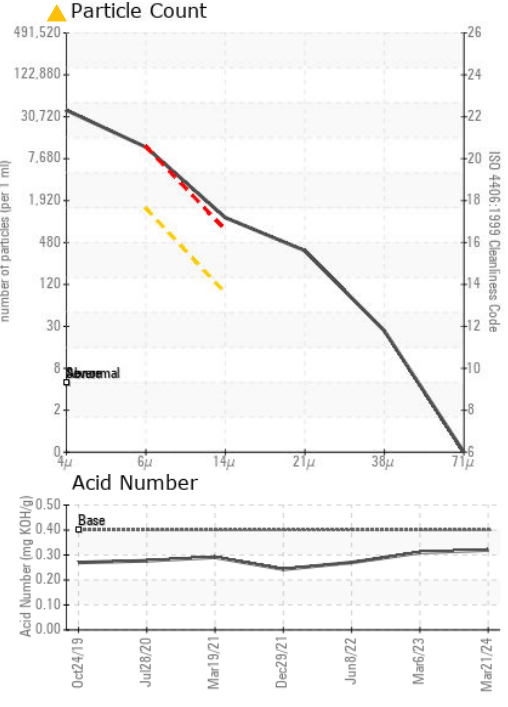
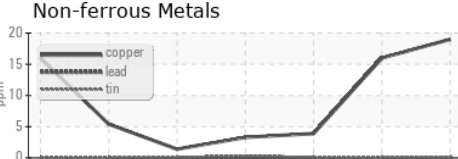
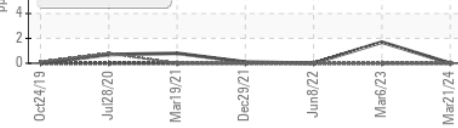


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.6	43.7	43.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016198 **Received** : 10 Apr 2024
Lab Number : 06144267 **Tested** : 11 Apr 2024
Unique Number : 10969075 **Diagnosed** : 11 Apr 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

THERMO FISHER SCIENTIFIC
 1321 PLANO RD
 RICHARDSON, TX
 US 75081
 Contact: Service Manager

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: