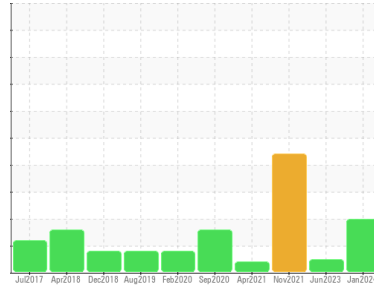




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER SK 20 5775016 (S/N 1762)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-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

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	KC127699	KC122759	KC97607
Sample Date	Client Info	16 Jan 2024	20 Jun 2023	10 Nov 2021
Machine Age	hrs	20879	19421	14915
Oil Age	hrs	0	0	1893
Oil Changed	Client Info	N/A	N/A	Not Changd
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	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	0	<1
Aluminum	ppm	ASTM D5185m >10	0	1	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	2	6	6
Tin	ppm	ASTM D5185m >10	0	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m 90	0	4	<1
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 90	50	11	41
Calcium	ppm	ASTM D5185m 2	0	0	<1
Phosphorus	ppm	ASTM D5185m	0	4	8
Zinc	ppm	ASTM D5185m	9	16	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	17	4	3
Potassium	ppm	ASTM D5185m >20	2	0	<1
Water	%	ASTM D6304 >0.05	0.008	0.008	▲ 0.197
ppm Water	ppm	ASTM D6304 >500	80	84.4	▲ 1970

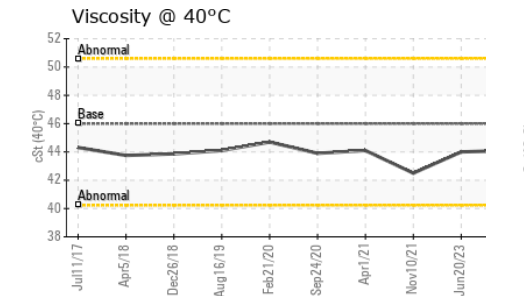
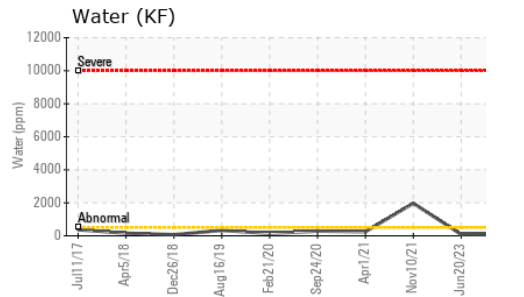
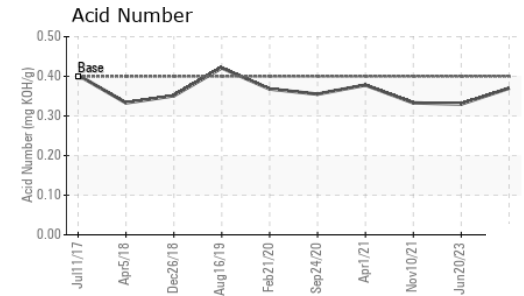
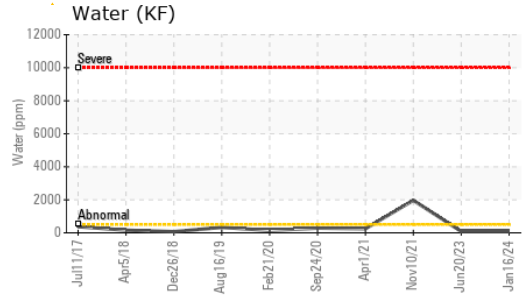
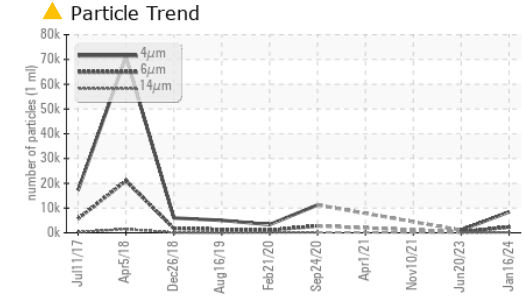
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	8477	1057	---
Particles >6µm	ASTM D7647 >1300	▲ 2340	350	---
Particles >14µm	ASTM D7647 >80	▲ 177	31	---
Particles >21µm	ASTM D7647 >20	▲ 53	7	---
Particles >38µm	ASTM D7647 >4	▲ 5	0	---
Particles >71µm	ASTM D7647 >3	▲ 1	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/18/15	17/16/12	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.37	0.33	0.333

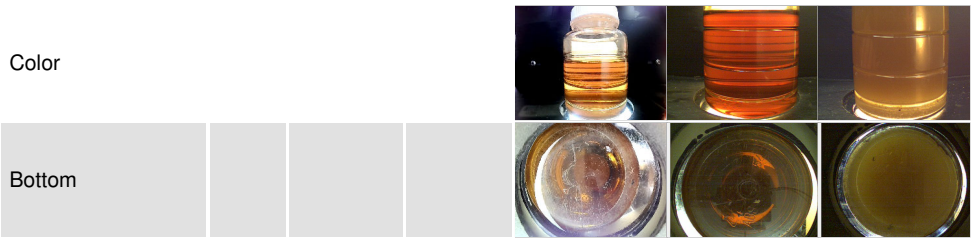
OIL ANALYSIS REPORT



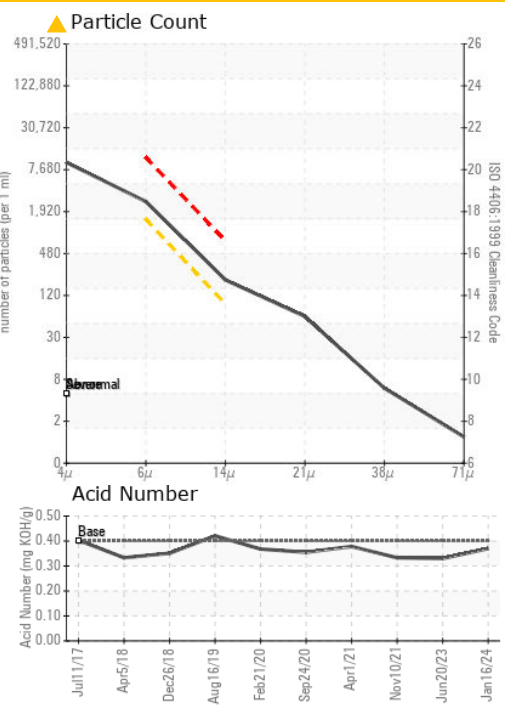
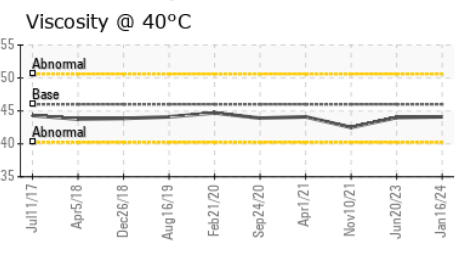
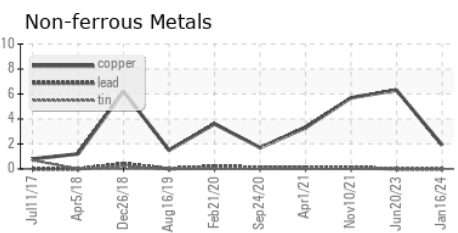
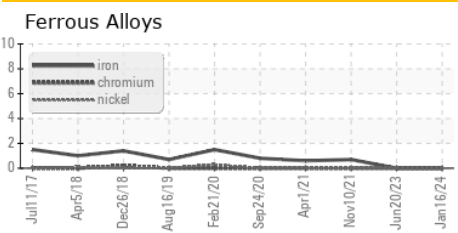
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.1	44.0	42.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC127699 **Received** : 30 Jan 2024
Lab Number : 06073979 **Diagnosed** : 31 Jan 2024
Unique Number : 10856070 **Diagnostician** : Jonathan Hester
Test Package : IND 2

H LOEB CORPORATION
 419 SAWYER ST
 NEW BEDFORD, MA
 US 02746
 Contact: F DENIS
 FDENIS@HLOEB.COM
 T:
 F:

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)