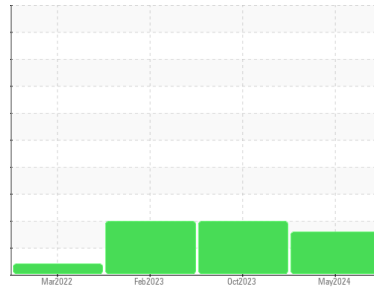




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER SM13 7763555 (S/N 1330)

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		KCPA018033	KCPA007897	KCP55508
Sample Date	Client Info		30 May 2024	30 Oct 2023	10 Feb 2023
Machine Age	hrs	Client Info	19754	15169	10381
Oil Age	hrs	Client Info	8790	0	6000
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	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	17	14	26
Tin	ppm	ASTM D5185m >10	0	<1	<1
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	<1
Magnesium	ppm	ASTM D5185m 90	9	36	13
Calcium	ppm	ASTM D5185m 2	0	3	2
Phosphorus	ppm	ASTM D5185m	1	<1	4
Zinc	ppm	ASTM D5185m	10	<1	15
Sulfur	ppm	ASTM D5185m	19802	17990	16972

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	1	6
Sodium	ppm	ASTM D5185m	12	24	9
Potassium	ppm	ASTM D5185m >20	<1	4	1
Water	%	ASTM D6304 >0.05	0.007	0.016	0.004
ppm Water	ppm	ASTM D6304 >500	74	169	47.3

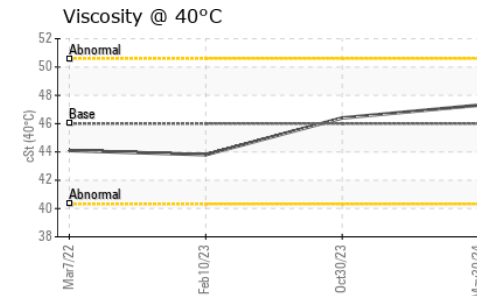
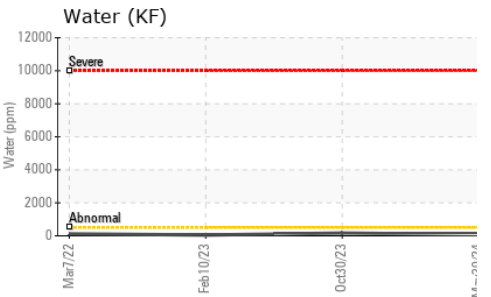
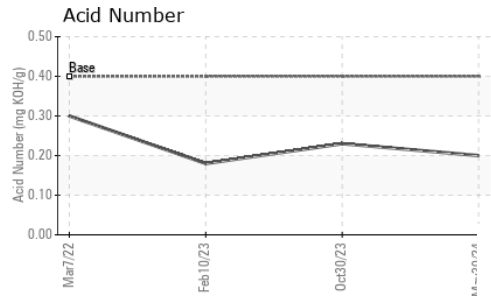
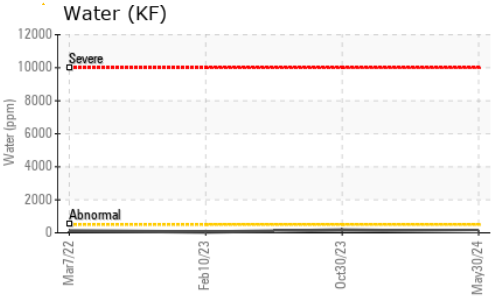
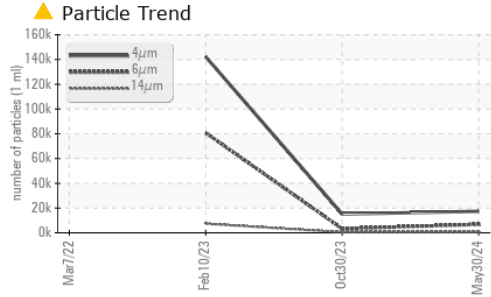
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		17400	15100	142190
Particles >6µm	ASTM D7647 >1300		▲ 6805	▲ 3311	▲ 80709
Particles >14µm	ASTM D7647 >80		▲ 524	▲ 486	▲ 7365
Particles >21µm	ASTM D7647 >20		▲ 77	▲ 227	▲ 1027
Particles >38µm	ASTM D7647 >4		1	▲ 23	▲ 8
Particles >71µm	ASTM D7647 >3		0	1	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/20/16	▲ 21/19/16	▲ 24/24/20

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.20	0.23	0.18

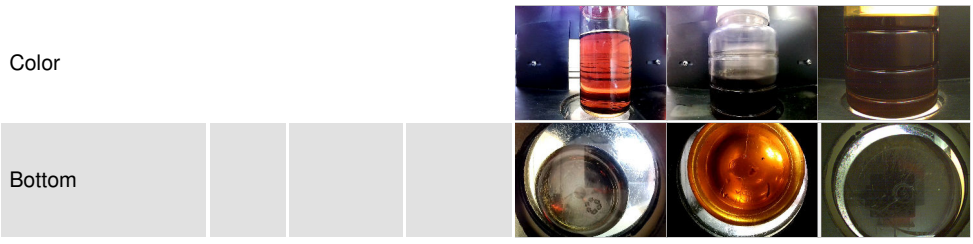
OIL ANALYSIS REPORT



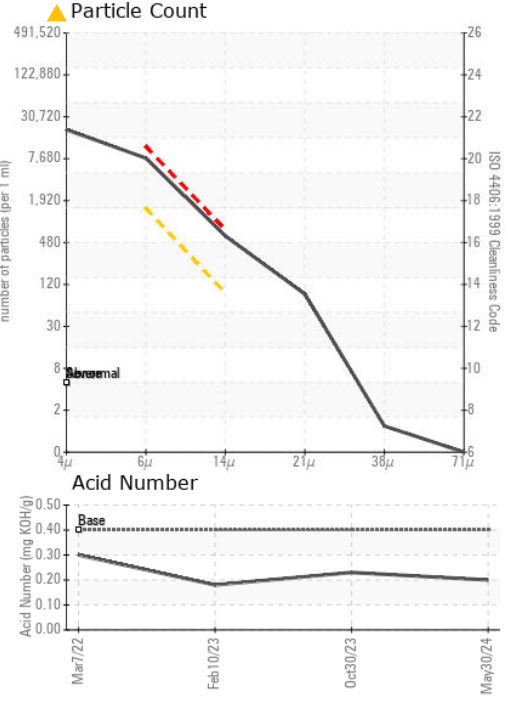
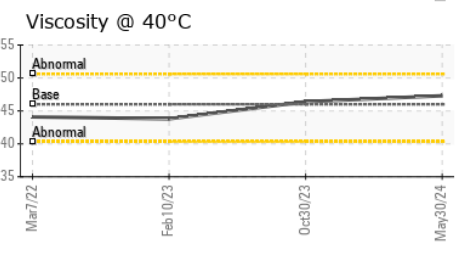
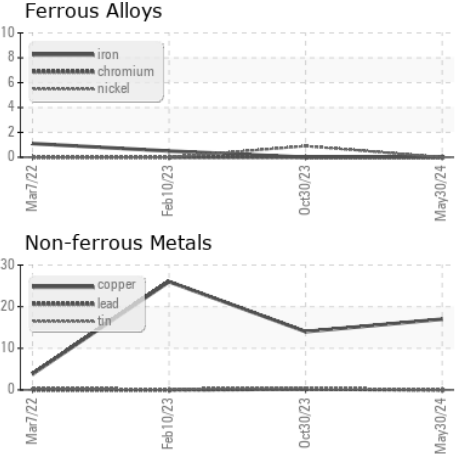
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.3	46.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018033
Lab Number : 06202071
Unique Number : 11069532
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 06 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 09 Jun 2024 - Don Baldrige

BURD & FLETCHER
 5151 GEOSPACE DR
 INDEPENDENCE, MO
 US 64056
 Contact: ANDY AZIERE
 andy.aziere@burdfletcher.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)