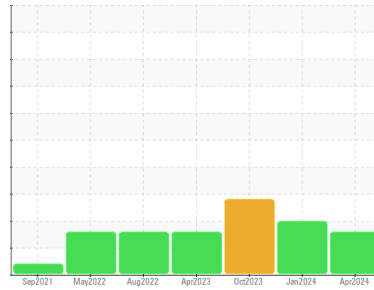




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER 7230870

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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	KCPA015354	KCPA008590	KCPA007231
Sample Date	Client Info	10 Apr 2024	10 Jan 2024	12 Oct 2023
Machine Age	hrs	7488	6805	5983
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	<1	0
Chromium	ppm	ASTM D5185m >10	0	<1	0
Nickel	ppm	ASTM D5185m >3	0	<1	<1
Titanium	ppm	ASTM D5185m >3	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	0	2	<1
Lead	ppm	ASTM D5185m >10	0	1	<1
Copper	ppm	ASTM D5185m >50	2	5	1
Tin	ppm	ASTM D5185m >10	0	1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	5	▲ 18	0
Molybdenum	ppm	ASTM D5185m 0	0	1	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 100	19	47	43
Calcium	ppm	ASTM D5185m 0	0	2	2
Phosphorus	ppm	ASTM D5185m 0	<1	15	4
Zinc	ppm	ASTM D5185m 0	0	7	6
Sulfur	ppm	ASTM D5185m 23500	17667	21568	18779

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	0	<1
Sodium	ppm	ASTM D5185m	9	0	10
Potassium	ppm	ASTM D5185m >20	0	2	2
Water	%	ASTM D6304 >0.05	0.010	▲ 0.367	▲ 0.304
ppm Water	ppm	ASTM D6304 >500	102	▲ 3670	▲ 3040

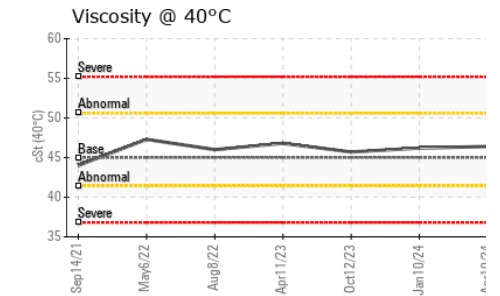
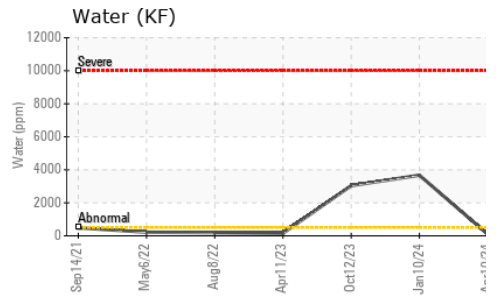
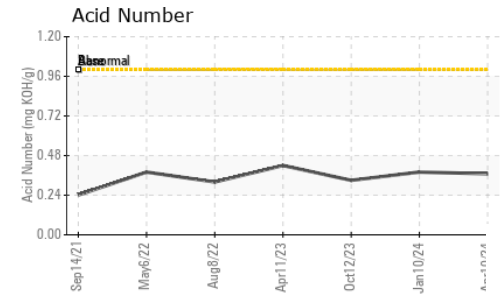
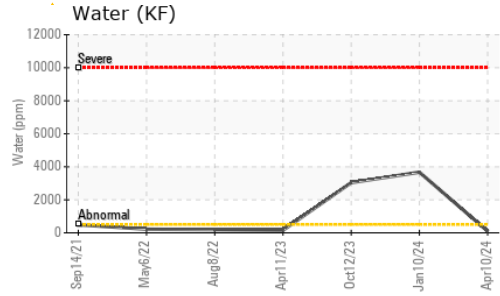
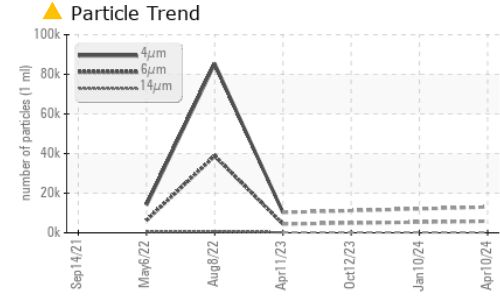
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	13022	---	---
Particles >6µm	ASTM D7647 >1300	▲ 5836	---	---
Particles >14µm	ASTM D7647 >80	▲ 197	---	---
Particles >21µm	ASTM D7647 >20	▲ 36	---	---
Particles >38µm	ASTM D7647 >4	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/20/15	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.37	0.38	0.33

OIL ANALYSIS REPORT

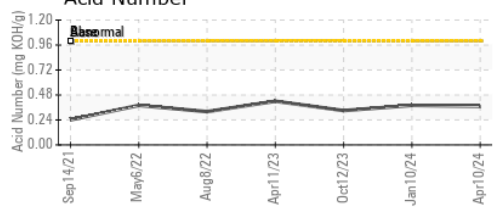
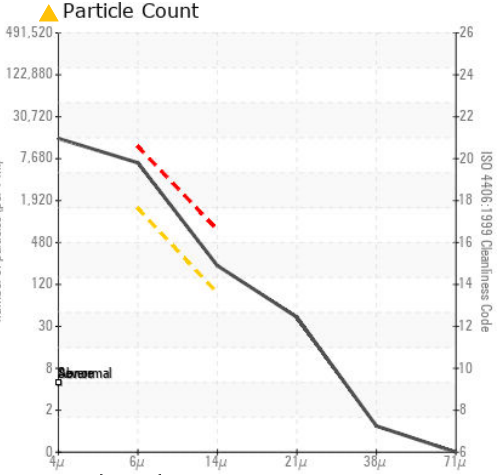
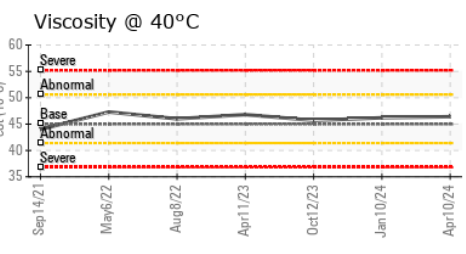
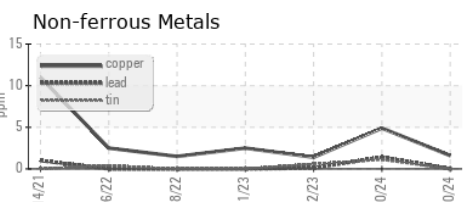
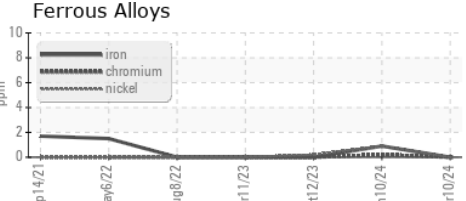


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.4	46.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015354
Lab Number : 06149530
Unique Number : 10979608
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 2024 - Don Baldrige

UPS
 423 LIBERATOR LN
 SMYRNA, TN
 US 37167
 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)