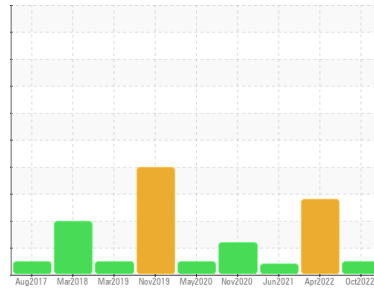


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER CSD75 5724395 (S/N 1031)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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	KCP46910D	KCP45104	KCP32092
Sample Date	Client Info	19 Oct 2022	18 Apr 2022	21 Jun 2021
Machine Age	hrs	15301	12748	10055
Oil Age	hrs	5247	2693	3586
Oil Changed	Client Info	Changed	Not Changd	Changed
Sample Status		NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	2	<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	<1	0
Aluminum	ppm	ASTM D5185m >10	0	4	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	8	20	7
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
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	11
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 90	<1	3	0
Calcium	ppm	ASTM D5185m 2	0	0	0
Phosphorus	ppm	ASTM D5185m	30	25	7
Zinc	ppm	ASTM D5185m	7	22	8
Sulfur	ppm	ASTM D5185m	18205	15395	14989

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	<1	6	1
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	0.013	▲ 0.196	0.006
ppm Water	ppm	ASTM D6304 >500	133.2	▲ 1960	67.1

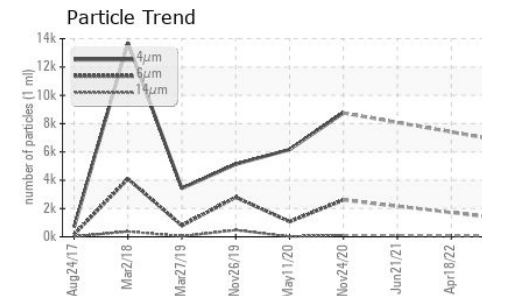
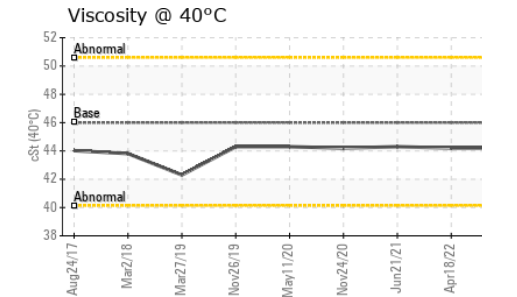
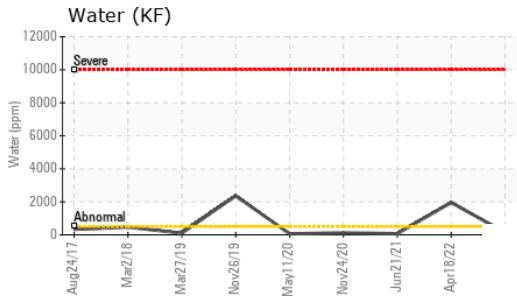
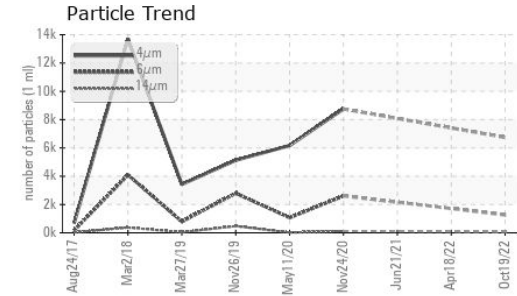
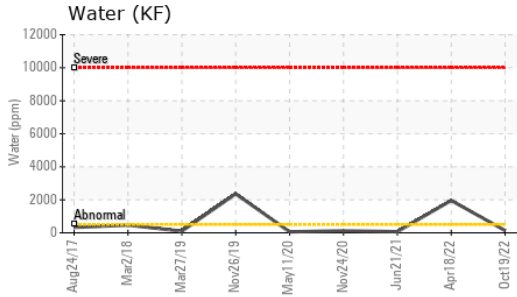
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	6743	---	---
Particles >6µm	ASTM D7647 >1300	1265	---	---
Particles >14µm	ASTM D7647 >80	59	---	---
Particles >21µm	ASTM D7647 >20	12	---	---
Particles >38µm	ASTM D7647 >4	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	20/17/13	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.33	0.36	0.326

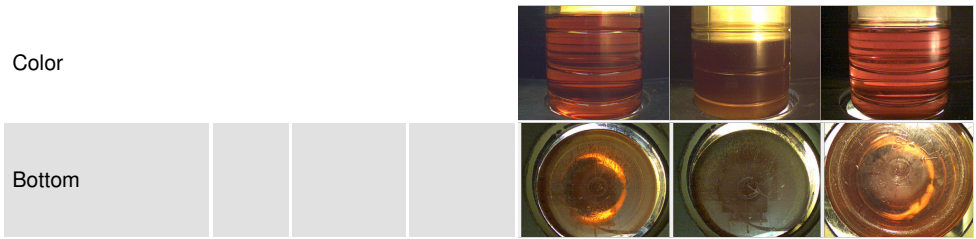
OIL ANALYSIS REPORT



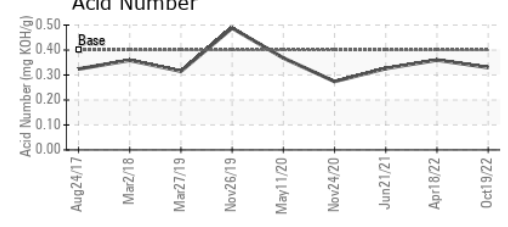
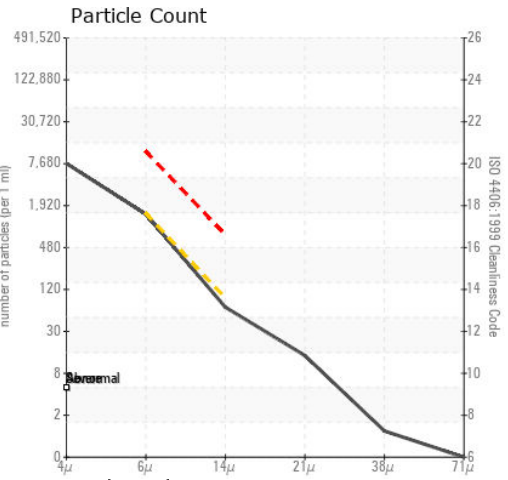
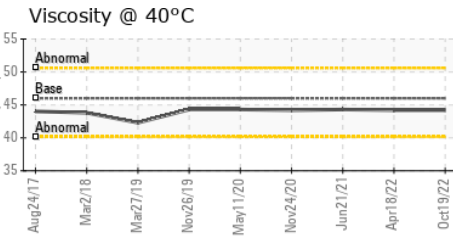
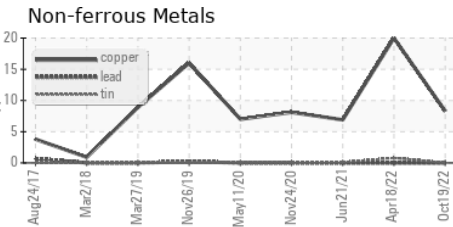
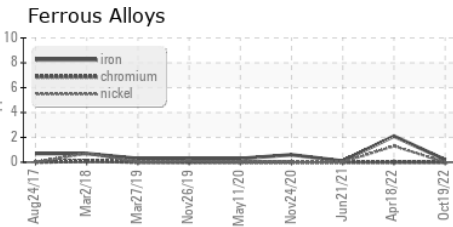
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ VHEVY ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
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	46	44.2	44.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP46910D **Received** : 06 Dec 2022
Lab Number : 05710439 **Diagnosed** : 09 Dec 2022
Unique Number : 10245014 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

RAPA - RAUSCH & PAUSCH
 2450 PAUL PARKS LN
 AUBURN, AL
 US 36832
 Contact: S. SMITH
 ssmith@rapa.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)

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F: