KAESER COMPRESSORS
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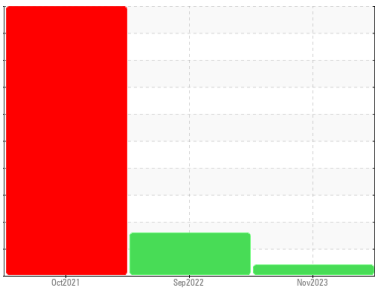
OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
7698387 (S/N 1093)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KCPA005763**	KCP50464	KCP38753
Sample Date		Client Info		**15 Nov 2023**	23 Sep 2022	05 Oct 2021
Machine Age	hrs	Client Info		**18852**	12142	5359
Oil Age	hrs	Client Info		**0**	6189	5359
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	SEVERE

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**	0	1
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**5**	6	7
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	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	<1
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m	100	**0**	0	0
Calcium	ppm	ASTM D5185m	0	**0**	0	<1
Phosphorus	ppm	ASTM D5185m	0	**0**	3	2
Zinc	ppm	ASTM D5185m	0	**0**	0	0
Sulfur	ppm	ASTM D5185m	23500	**19908**	18244	12919

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	0
Sodium	ppm	ASTM D5185m		**<1**	0	<1
Potassium	ppm	ASTM D5185m	>20	**0**	0	0
Water	%	ASTM D6304	>0.05	**0.010**	0.014	▲ 2.16
ppm Water	ppm	ASTM D6304	>500	**107**	141.9	▲ 21600

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1311**	22279	6072
Particles >6µm		ASTM D7647	>1300	**332**	▲ 4007	▲ 3308
Particles >14µm		ASTM D7647	>80	**33**	▲ 150	▲ 563
Particles >21µm		ASTM D7647	>20	**10**	▲ 28	▲ 190
Particles >38µm		ASTM D7647	>4	**1**	1	▲ 29
Particles >71µm		ASTM D7647	>3	**0**	0	▲ 3
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**18/16/12**	▲ 22/19/14	▲ 19/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.55**	0.059	0.351

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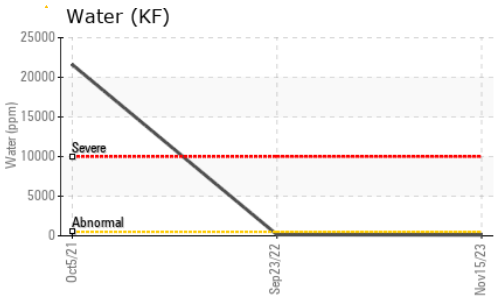
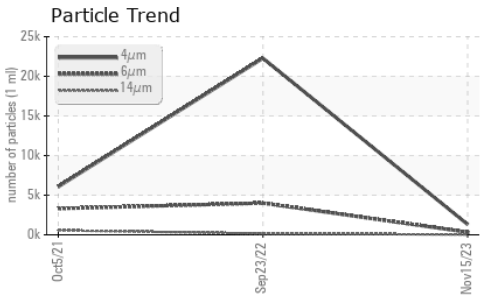
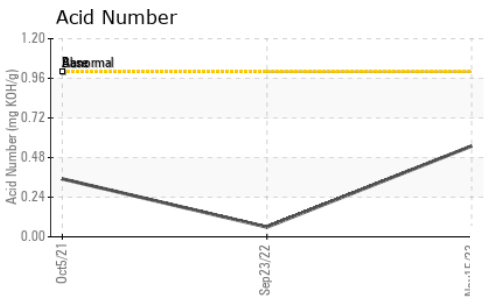
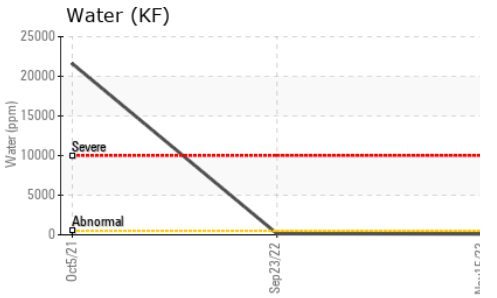
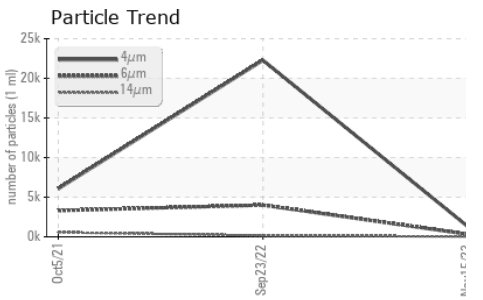




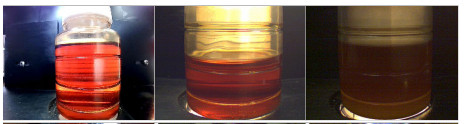
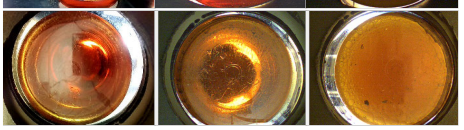




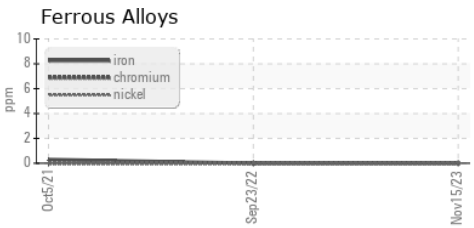


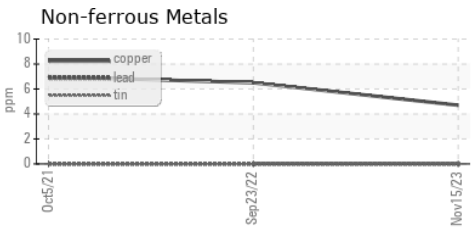
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	LIGHT
Sand/Dirt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

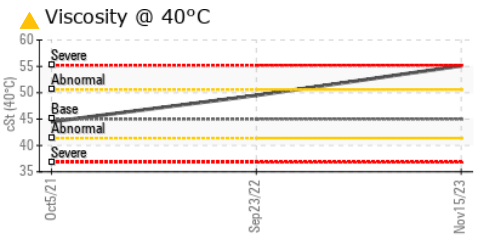
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	▲ **55.1**	49.5	44.5

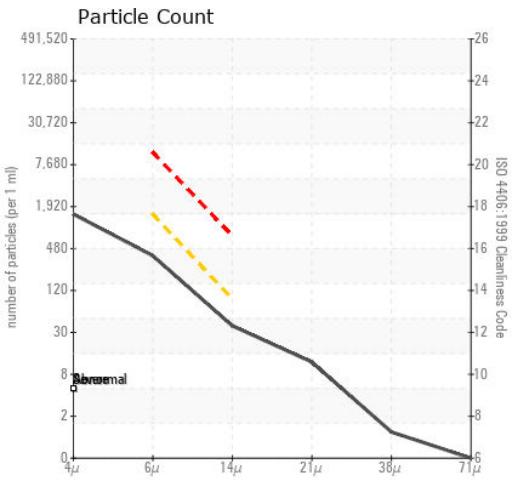
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

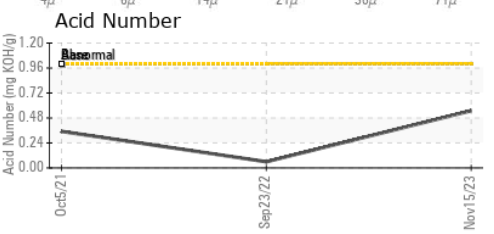
GRAPHS











ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA005763
Lab Number : 06161456
Unique Number : 10996879
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 26 Apr 2024
Tested : 02 May 2024
Diagnosed : 02 May 2024 - Jonathan Hester

HEXION
333 NEILS EDDY RD
RIEGELWOOD, NC
US 28456
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: