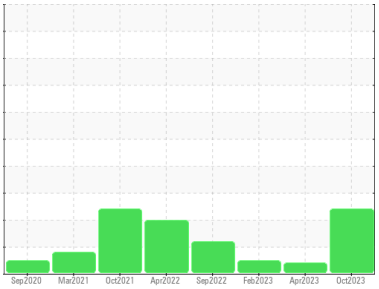
PROBLEM SUMMARY

Sample Rating Trend

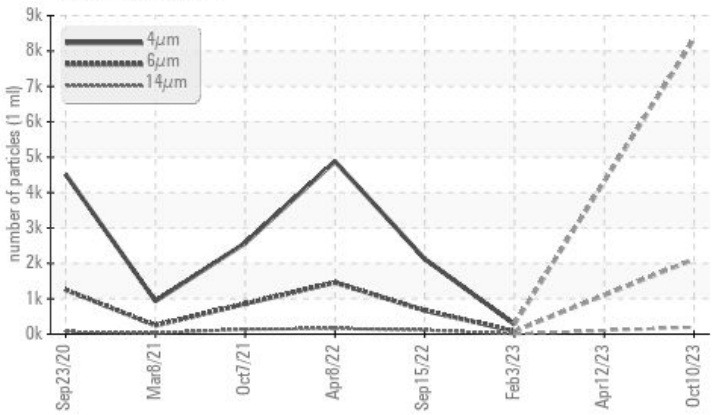


WEAR

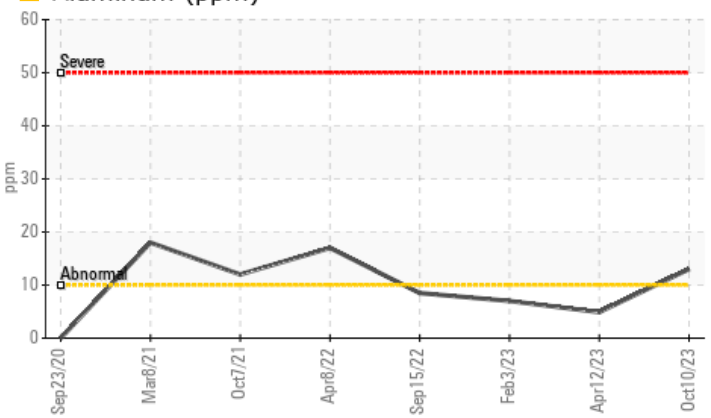
Machine Id
KAESER CSD 100ST 6907603 (S/N 1141)
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Aluminum (ppm)



RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>10	▲ **13**	5	7
Particles >6µm		ASTM D7647	>1300	▲ **2118**	---	83
Particles >14µm		ASTM D7647	>80	▲ **194**	---	7
Particles >21µm		ASTM D7647	>20	▲ **54**	---	2
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/18/15**	---	15/14/10

Customer Id: SPRBET
Sample No.: KC05981227
Lab Number: 05981227
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

12 Apr 2023 Diag: Angela Borella

VIS DEBRIS

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

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03 Feb 2023 Diag: Angela Borella

NORMAL

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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15 Sep 2022 Diag: Don Baldridge

ISO

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

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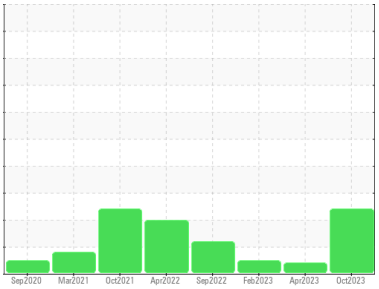
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
KAESER CSD 100ST 6907603 (S/N 1141)
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

▲ Recommendation
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear
The aluminum level is abnormal. All other 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		**KC05981227**	KC102604	KC103410
Sample Date		Client Info		**10 Oct 2023**	12 Apr 2023	03 Feb 2023
Machine Age	hrs	Client Info		**15642**	14014	12582
Oil Age	hrs	Client Info		**0**	1432	2691
Oil Changed		Client Info		**N/A**	Not Changd	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**8**	<1	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	0
Aluminum	ppm	ASTM D5185m	>10	▲ **13**	5	7
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**4**	8	6
Tin	ppm	ASTM D5185m	>10	**0**	0	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
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**0**	0	1
Calcium	ppm	ASTM D5185m		**0**	0	0
Phosphorus	ppm	ASTM D5185m	500	**385**	439	383
Zinc	ppm	ASTM D5185m		**219**	174	192

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**2**	0	1
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	<1
Water	%	ASTM D6304	>0.05	**0.005**	0.008	0.005
ppm Water	ppm	ASTM D6304	>500	**55.8**	83.2	58.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**8339**	---	281
Particles >6µm		ASTM D7647	>1300	▲ **2118**	---	83
Particles >14µm		ASTM D7647	>80	▲ **194**	---	7
Particles >21µm		ASTM D7647	>20	▲ **54**	---	2
Particles >38µm		ASTM D7647	>4	**2**	---	0
Particles >71µm		ASTM D7647	>3	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **20/18/15**	---	15/14/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	**1.17**	1.44	0.87

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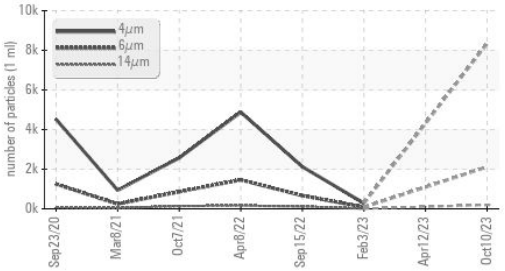
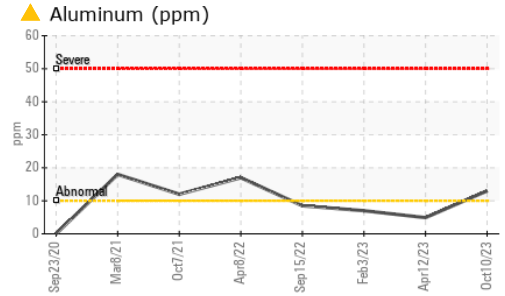
OIL ANALYSIS REPORT

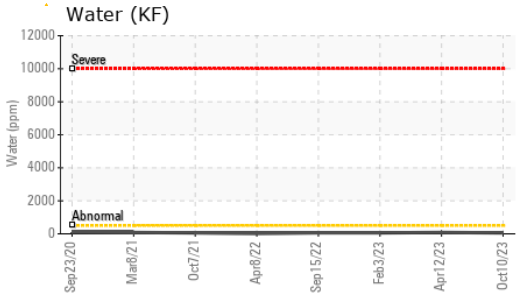
Particle Trend



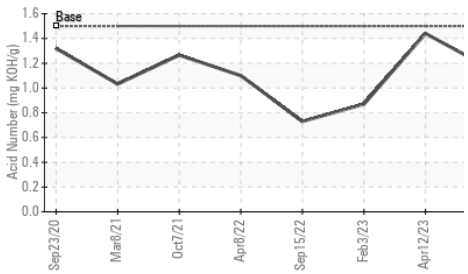
Aluminum (ppm)



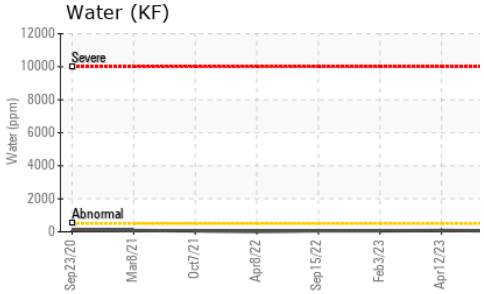
Water (KF)



Acid Number

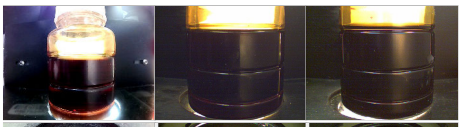
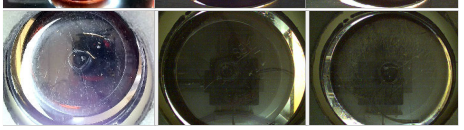


Water (KF)



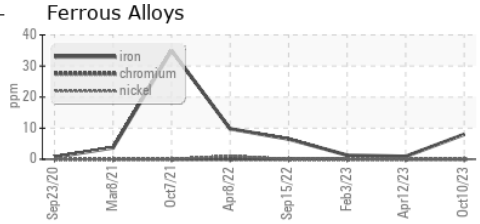
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Sand/Dirt	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	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**50.9**	46.5	47.3

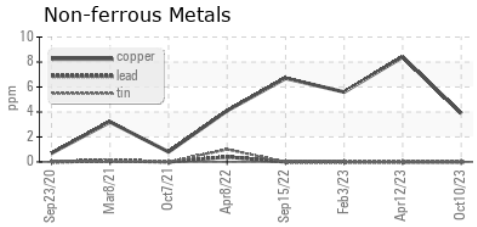
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

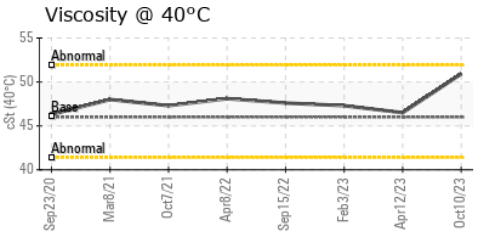
Ferrous Alloys



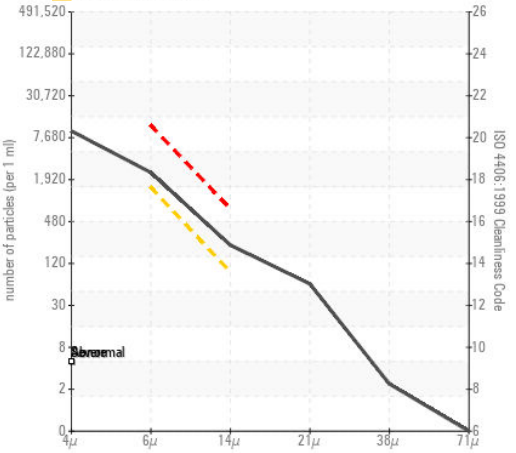
Non-ferrous Metals



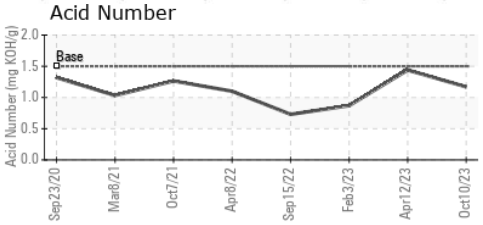
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05981227
Lab Number : 05981227
Unique Number : 10698522
Test Package : IND 2

Received : 17 Oct 2023
Diagnosed : 19 Oct 2023
Diagnostician : Jonathan Hester

Certificate L2367

SPRAY TEK
3010 AVE B
BETHLEHEM, PA
US 18017
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: