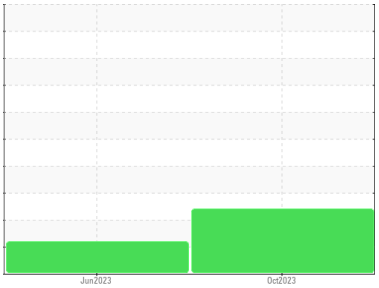
PROBLEM SUMMARY

Sample Rating Trend

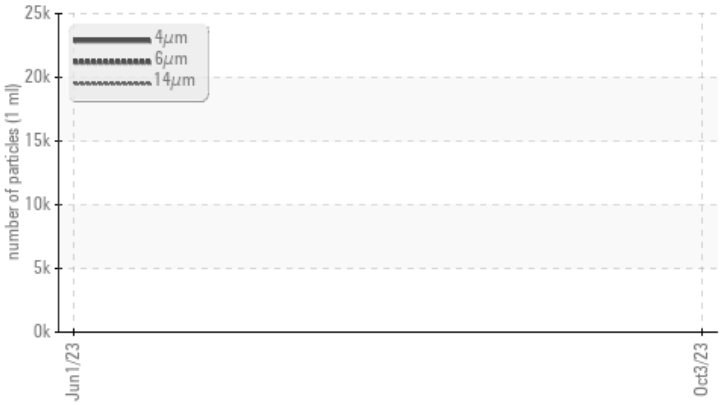


WEAR

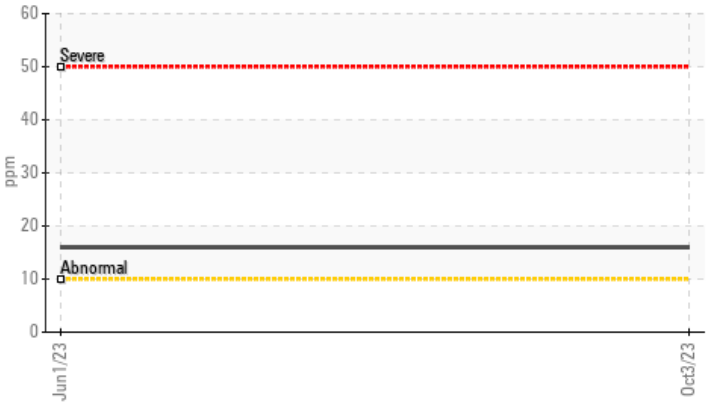
Machine Id
8837112 (S/N 1376)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

COMPONENT CONDITION SUMMARY

Particle Trend



Aluminum (ppm)



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	---
Aluminum	ppm	ASTM D5185m	>10	▲ **16**	▲ 16	---
Particles >6µm		ASTM D7647	>1300	▲ **10059**	---	---
Particles >14µm		ASTM D7647	>80	▲ **962**	---	---
Particles >21µm		ASTM D7647	>20	▲ **211**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **22/21/17**	---	---

Customer Id: NELNEW
Sample No.: KC05982405
Lab Number: 05982405
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

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

01 Jun 2023 Diag: Jonathan Hester

WEAR

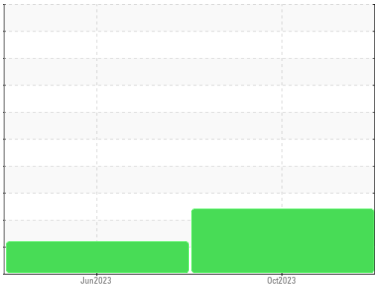
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.The aluminum level is abnormal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
8837112 (S/N 1376)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. 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		**KC05982405**	KC102041	---
Sample Date		Client Info		**03 Oct 2023**	01 Jun 2023	---
Machine Age	hrs	Client Info		**6015**	3040	---
Oil Age	hrs	Client Info		**0**	3040	---
Oil Changed		Client Info		**N/A**	Not Changd	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**4**	4	---
Chromium	ppm	ASTM D5185m	>10	**0**	0	---
Nickel	ppm	ASTM D5185m	>3	**0**	0	---
Titanium	ppm	ASTM D5185m	>3	**0**	0	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>10	▲ **16**	▲ 16	---
Lead	ppm	ASTM D5185m	>10	**<1**	0	---
Copper	ppm	ASTM D5185m	>50	**1**	<1	---
Tin	ppm	ASTM D5185m	>10	**0**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m	90	**0**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	<1	---
Magnesium	ppm	ASTM D5185m	90	**0**	0	---
Calcium	ppm	ASTM D5185m	2	**0**	0	---
Phosphorus	ppm	ASTM D5185m		**62**	61	---
Zinc	ppm	ASTM D5185m		**26**	0	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**2**	0	---
Sodium	ppm	ASTM D5185m		**4**	<1	---
Potassium	ppm	ASTM D5185m	>20	**5**	2	---
Water	%	ASTM D6304	>0.05	**0.003**	0.001	---
ppm Water	ppm	ASTM D6304	>500	**35.5**	6.6	---

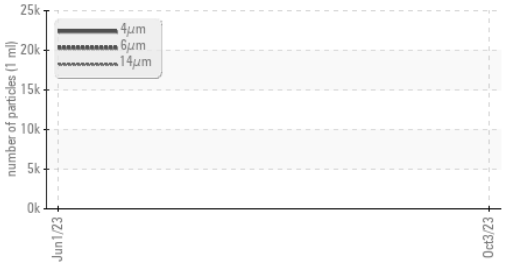
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**22853**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **10059**	---	---
Particles >14µm		ASTM D7647	>80	▲ **962**	---	---
Particles >21µm		ASTM D7647	>20	▲ **211**	---	---
Particles >38µm		ASTM D7647	>4	**4**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **22/21/17**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.142**	0.11	---

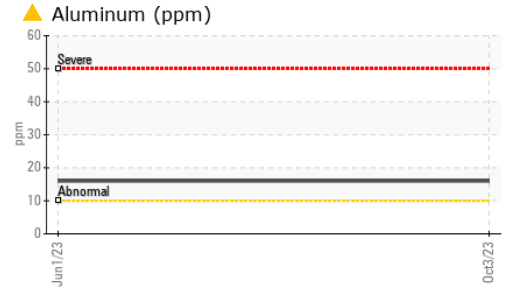
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

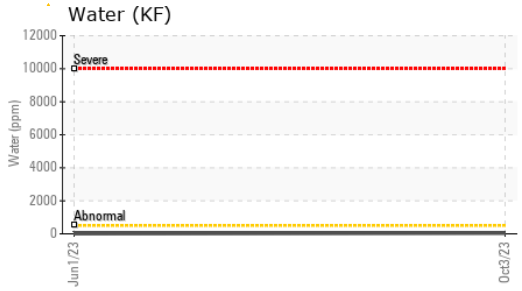
Particle Trend



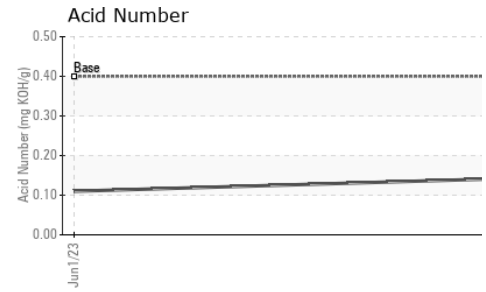
Aluminum (ppm)



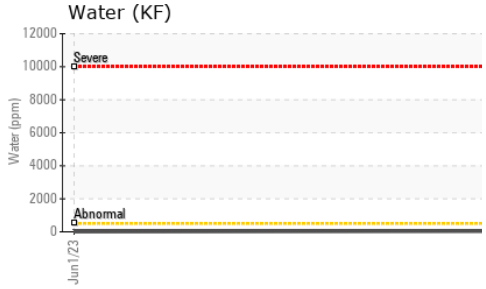
Water (KF)



Acid Number

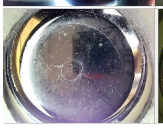


Water (KF)



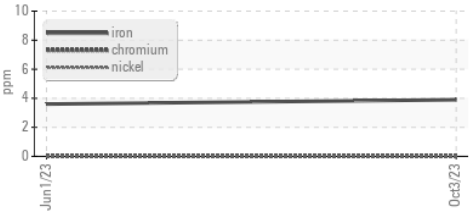
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**LIGHT**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	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	**47.5**	47.1	---

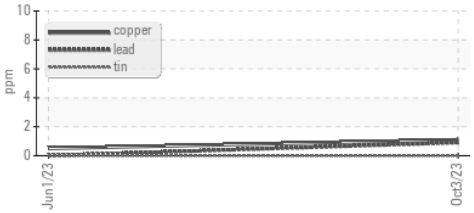
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					no image
Bottom					no image

GRAPHS

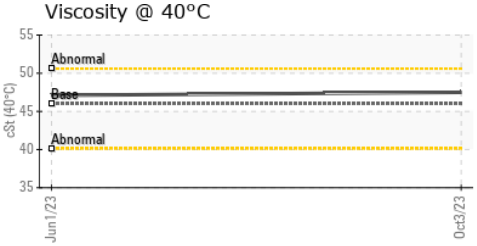
Ferrous Alloys



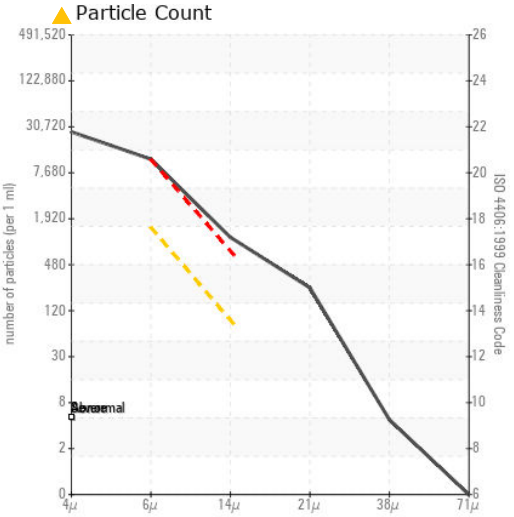
Non-ferrous Metals



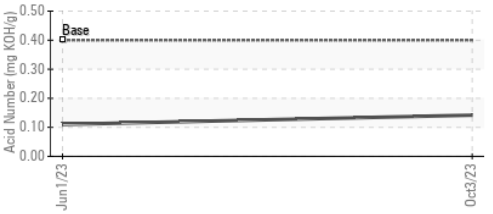
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05982405
Lab Number : 05982405
Unique Number : 10699700
Test Package : IND 2

Received : 18 Oct 2023
Diagnosed : 25 Oct 2023
Diagnostician : Jonathan Hester

NELSON STEEL
1015 NEW SALEM RD
NEW SALEM, PA
US 15468
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: