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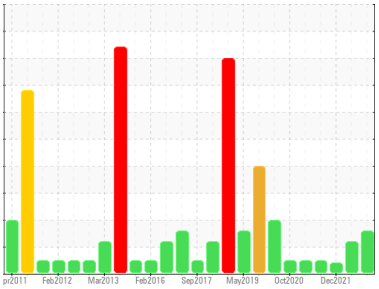
PROBLEM SUMMARY

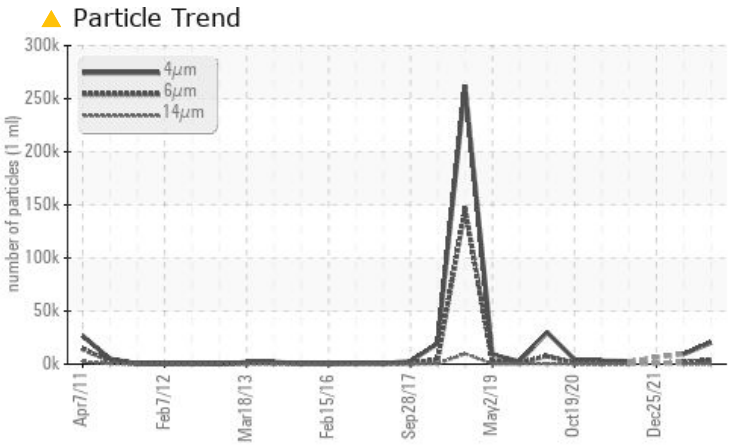
Sample Rating Trend



ISO

Machine Id
KAESER ASD 40 3874839 (S/N 1343)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

COMPONENT CONDITION SUMMARY



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	ATTENTION	ABNORMAL
Particles >6µm		ASTM D7647	>1300	▲ **3536**	▲ 1669	---
Particles >14µm		ASTM D7647	>80	▲ **114**	▲ 127	---
Particles >21µm		ASTM D7647	>20	▲ **25**	▲ 31	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **22/19/14**	▲ 18/14	---

Customer Id: ATIOAK
Sample No.: KC91351
Lab Number: 05646631
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

30 Mar 2022 Diag: Don Baldridge

ISO

The 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

25 Dec 2021 Diag: Jonathan Hester

VIS DEBRIS

Oil and 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 suitable for further service.

view report

17 Jun 2021 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. 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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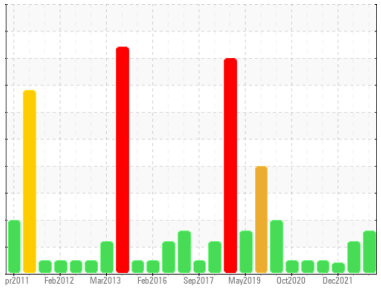
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
KAESER ASD 40 3874839 (S/N 1343)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

▲ Recommendation
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 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	history 1	history 2
Sample Number				**KC91351**	KC91327	KC95286
Sample Date				**13 Sep 2022**	30 Mar 2022	25 Dec 2021
Machine Age	hrs			**59362**	57105	55783
Oil Age	hrs			**3000**	2000	4000
Oil Changed				**Not Changd**	Not Changd	Changed
Sample Status				**ABNORMAL**	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	**0**	<1	2
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**	<1	0
Aluminum	ppm	ASTM D5185m	>10	**0**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**15**	3	11
Tin	ppm	ASTM D5185m	>10	**0**	<1	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	history 1	history 2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m	90	**0**	33	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m	90	**0**	56	0
Calcium	ppm	ASTM D5185m	2	**0**	2	0
Phosphorus	ppm	ASTM D5185m		**1**	0	3
Zinc	ppm	ASTM D5185m		**0**	11	2

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	0
Sodium	ppm	ASTM D5185m		**0**	18	0
Potassium	ppm	ASTM D5185m	>20	**0**	7	0
Water	%	ASTM D6304	>0.05	**0.006**	0.010	0.004
ppm Water	ppm	ASTM D6304	>500	**63.8**	103.0	48.6

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		**20136**	9458	---
Particles >6µm		ASTM D7647	>1300	▲ **3536**	▲ 1669	---
Particles >14µm		ASTM D7647	>80	▲ **114**	▲ 127	---
Particles >21µm		ASTM D7647	>20	▲ **25**	▲ 31	---
Particles >38µm		ASTM D7647	>4	**2**	2	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **22/19/14**	▲ 18/14	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.34**	0.38	0.420

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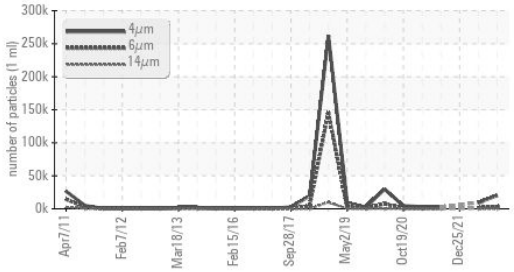
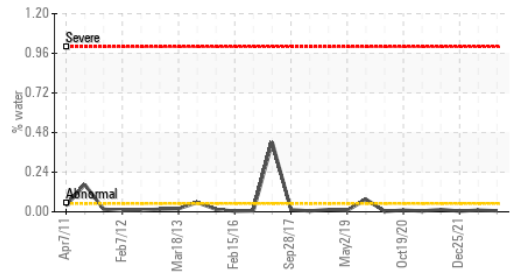
OIL ANALYSIS REPORT

▲ Particle Trend



Water



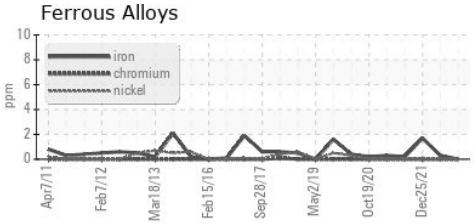
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	▲ MODER
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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	**44.3**	44.1	44.8

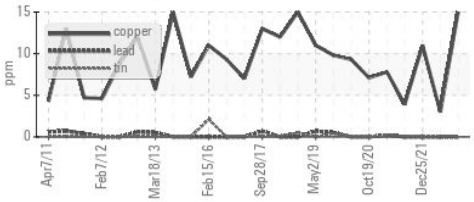
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					
Bottom					

GRAPHS

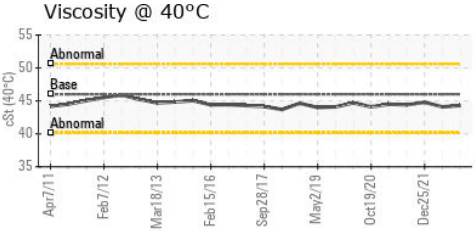
Ferrous Alloys



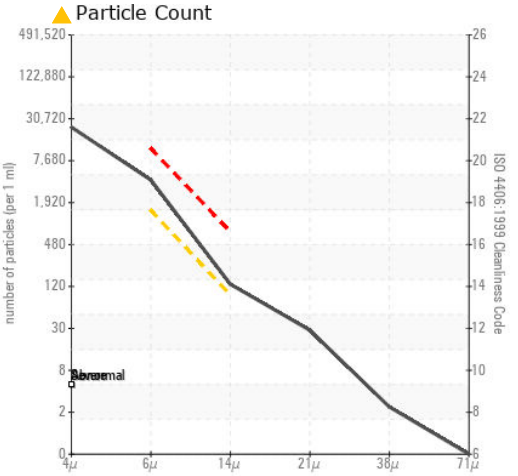
Non-ferrous Metals



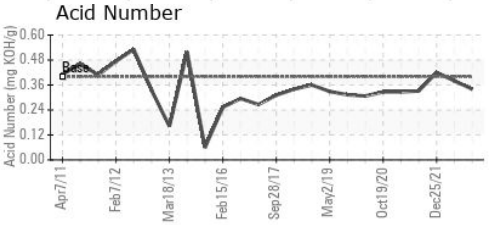
Viscosity @ 40°C



▲ Particle Count



Acid Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC91351
Lab Number : 05646631
Unique Number : 10141170
Test Package : IND 2

Received : 20 Sep 2022
Diagnosed : 22 Sep 2022
Diagnostician : Jonathan Hester

ATI POWDER METALS
1001 ROBB HILL RD
OAKDALE, PA
USA 15077
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: