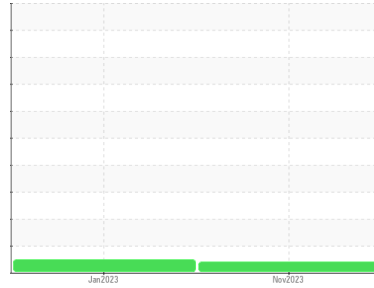# KAESER COMPRESSORS
Built for a lifetime.

PROBLEM SUMMARY

Sample Rating Trend

Machine Id
KAESER ASD 40S 7569466 (S/N 1143)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

Jan2023   Nov2023

COMPONENT CONDITION SUMMARY

No relevant graphs to display

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	---
Debris	scalar	*Visual	NONE	⚠ **MODER**	NONE	---

Customer Id: ROYHOL
Sample No.: KCPA007259
Lab Number: 06006357
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

25 Jan 2023 Diag: Doug Bogart
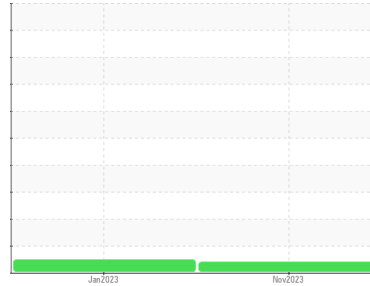
view report

NORMAL

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. 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.

KAESER COMPRESSORS — Built for a lifetime.™

Sample Rating Trend

Jan2023   Nov2023

VIS DEBRIS

Machine Id
KAESER ASD 40S 7569466 (S/N 1143)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

▲ Contamination
Moderate concentration of visible dirt/debris 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		**KCPA007259**	KC106786	---
Sample Date	Client Info		**08 Nov 2023**	25 Jan 2023	---
Machine Age	hrs	Client Info	**7707**	5114	---
Oil Age	hrs	Client Info	**0**	3000	---
Oil Changed		Client Info	**N/A**	Changed	---
Sample Status			**ABNORMAL**	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	0	---
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	**0**	0	---
Lead	ppm	ASTM D5185m	>10	**0**	0	---
Copper	ppm	ASTM D5185m	>50	**6**	8	---
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**	0	---
Barium	ppm	ASTM D5185m	90	**0**	<1	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	0	---
Magnesium	ppm	ASTM D5185m	100	**0**	<1	---
Calcium	ppm	ASTM D5185m	0	**0**	0	---
Phosphorus	ppm	ASTM D5185m	0	**<1**	2	---
Zinc	ppm	ASTM D5185m	0	**0**	0	---
Sulfur	ppm	ASTM D5185m	23500	**17178**	14865	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	<1	---
Sodium	ppm	ASTM D5185m		**<1**	0	---
Potassium	ppm	ASTM D5185m	>20	**0**	<1	---
Water	%	ASTM D6304	>0.05	**0.012**	0.009	---
ppm Water	ppm	ASTM D6304	>500	**125.8**	95.2	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		**---**	1500	---
Particles >6µm	ASTM D7647	>1300	**---**	415	---
Particles >14µm	ASTM D7647	>80	**---**	28	---
Particles >21µm	ASTM D7647	>20	**---**	7	---
Particles >38µm	ASTM D7647	>4	**---**	1	---
Particles >71µm	ASTM D7647	>3	**---**	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	**---**	18/16/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.37**	0.37	---

OIL ANALYSIS REPORT

KAESER COMPRESSORS — Built for a lifetime.

Water (KF)
(graph, Water (ppm) vs Jan25/23 – Nov8/23; Severe ~10000, Abnormal near bottom)

Water (KF)
(graph, Water (ppm) vs Jan25/23 – Nov8/23; Severe ~10000, Abnormal near bottom)

Viscosity @ 40°C
(graph, cSt (40°C) vs Jan25/23 – Nov8/23; Severe 55, Abnormal 51, Base 45, Abnormal 41, Severe 37)
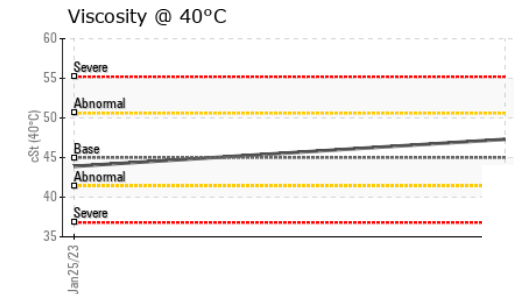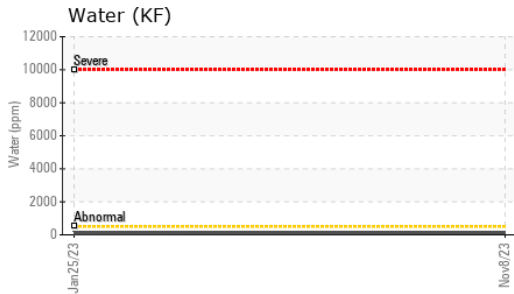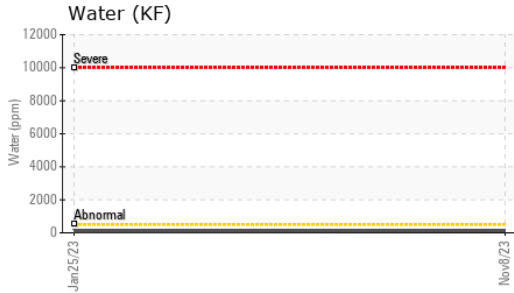
VISUAL

VISUAL	method		limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	⚠ **MODER**	NONE	---
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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**47.3**	43.9	---

SAMPLE IMAGES

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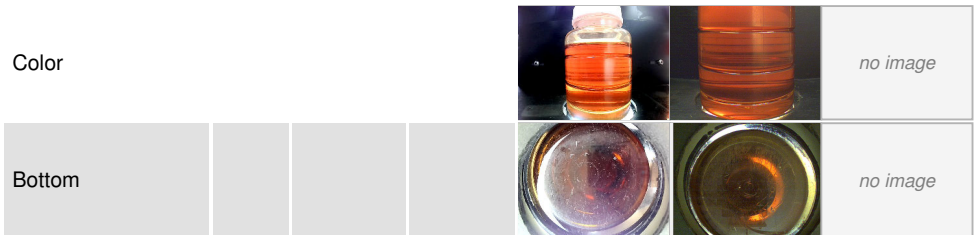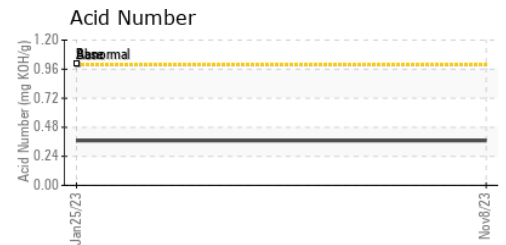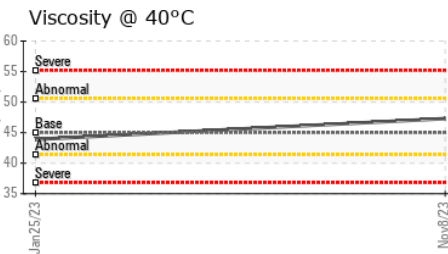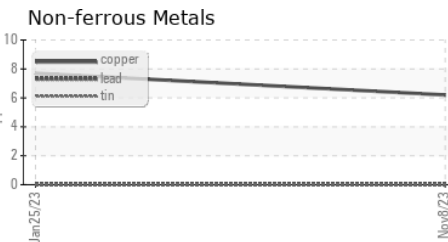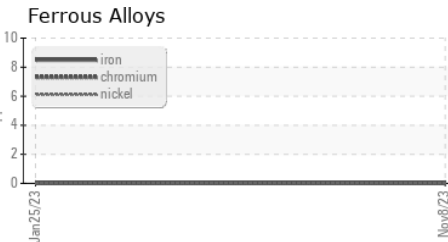
GRAPHS

Ferrous Alloys
(graph, ppm vs Jan25/23 – Nov8/23; iron, chromium, nickel)

Non-ferrous Metals
(graph, ppm vs Jan25/23 – Nov8/23; copper, lead, tin)

Viscosity @ 40°C
(graph, cSt (40°C) vs Jan25/23 – Nov8/23; Severe 55, Abnormal 51, Base 45, Abnormal 41, Severe 37)

Acid Number
(graph, Acid Number (mg KOH/g) vs Jan25/23 – Nov8/23; Abnormal ~0.96)

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)