KAESER COMPRESSORS
Built for a lifetime.
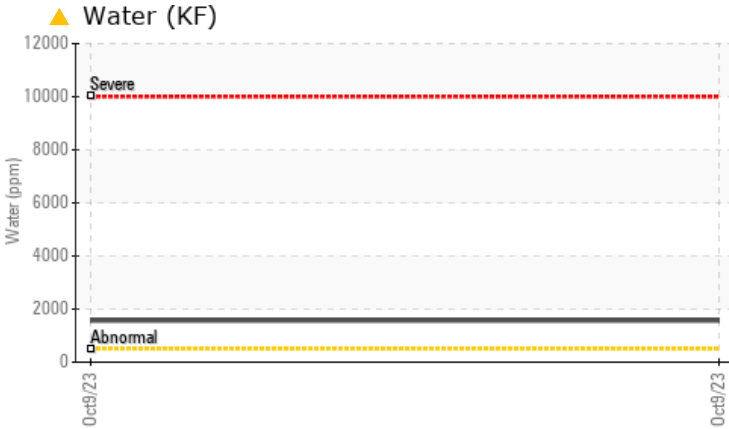
PROBLEM SUMMARY

Sample Rating Trend

WATER

Oct2023

Machine Id
8725698 (S/N 1399)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)

RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	---
Water	%	ASTM D6304	>0.05	▲ 0.157	---	---
ppm Water	ppm	ASTM D6304	>500	▲ 1570	---	---
Debris	scalar	*Visual	NONE	▲ MODER	---	---
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	---	---

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

OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Oct2023
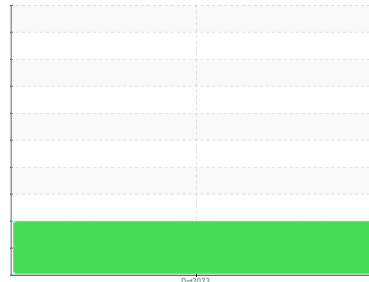
Machine Id
8725698 (S/N 1399)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

⚠ Recommendation
The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear
All component wear rates are normal.

⚠ Contamination
Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number		Client Info	KCPA007805	---	---
Sample Date		Client Info	09 Oct 2023	---	---
Machine Age	hrs	Client Info	2264	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed		Client Info	N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m	>3	0	---	---
Titanium	ppm	ASTM D5185m	>3	0	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	0	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>50	5	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---	---
Barium	ppm	ASTM D5185m	90	12	---	---
Molybdenum	ppm	ASTM D5185m	0	0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	100	27	---	---
Calcium	ppm	ASTM D5185m	0	0	---	---
Phosphorus	ppm	ASTM D5185m	0	3	---	---
Zinc	ppm	ASTM D5185m	0	16	---	---
Sulfur	ppm	ASTM D5185m	23500	18249	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	---	---
Sodium	ppm	ASTM D5185m		9	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Water	%	ASTM D6304	>0.05	⚠ 0.157	---	---
ppm Water	ppm	ASTM D6304	>500	⚠ 1570	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.36	---	---

OIL ANALYSIS REPORT

KAESER COMPRESSORS — Built for a lifetime.™

Charts (left column)

- Water (KF) — Water (ppm), Oct9/23 to Oct9/23 (Severe, Abnormal lines)
- Acid Number — Acid Number (mg KOH/g), Oct9/23 (Abnormal/Base lines)
- Viscosity @ 40°C — cSt (40°C), Oct9/23 (Severe, Abnormal, Base lines)
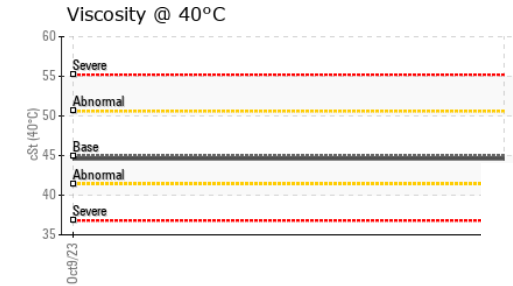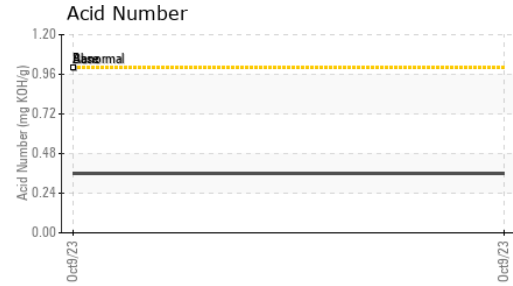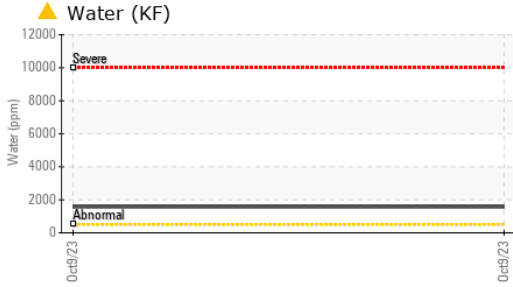
VISUAL

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

FLUID PROPERTIES

FLUID PROPERTIES	method		limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	**44.6**	---	---

SAMPLE IMAGES

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

GRAPHS

Ferrous Alloys
ppm — iron, chromium, nickel (Oct9/23 to Oct9/23)

Non-ferrous Metals
ppm — copper, lead, tin (Oct9/23 to Oct9/23)

Viscosity @ 40°C
cSt (40°C) — Severe, Abnormal, Base, Abnormal, Severe (Oct9/23 to Oct9/23)

Acid Number
Acid Number (mg KOH/g) — Abnormal/Base (Oct9/23 to Oct9/23)
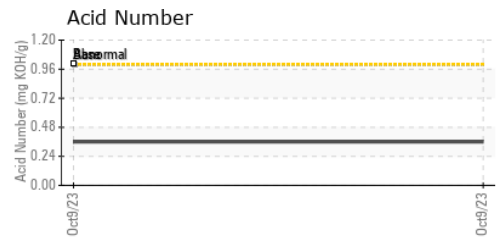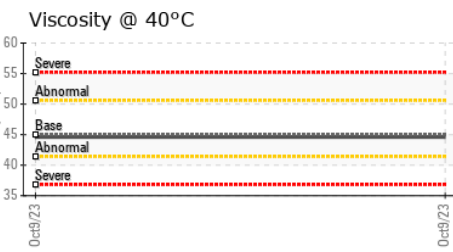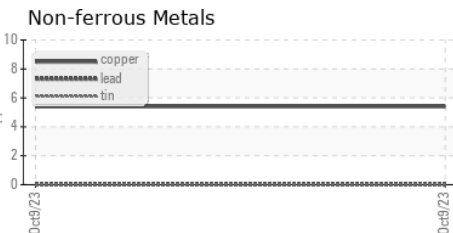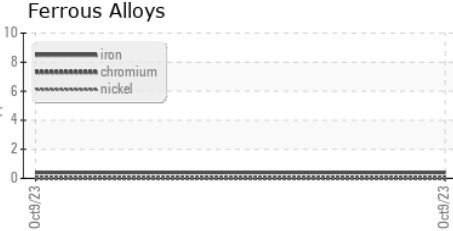
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA007805   **Received** : 17 Oct 2023
Lab Number : 05981906   **Diagnosed** : 19 Oct 2023
Unique Number : 10699201   **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

ANAB ACCREDITED — ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

ALLUXA INC
3660 N LAUGHLIN RD
SANTA ROSA, CA
US 95403
Contact: MARK PRIEST
mark.priest@alluxa.com
T:
F:

Report Id: ALLSANCAL [WUSCAR] 05981906 (Generated: 10/19/2023 13:39:39) Rev: 1   Contact/Location: MARK PRIEST - ALLSANCAL

Page 4 of 4