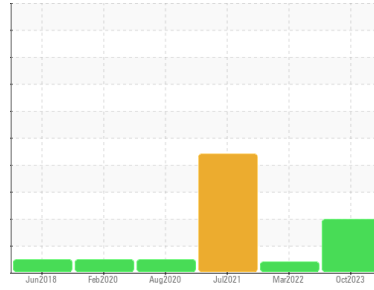




PROBLEM SUMMARY

Sample Rating Trend



WATER



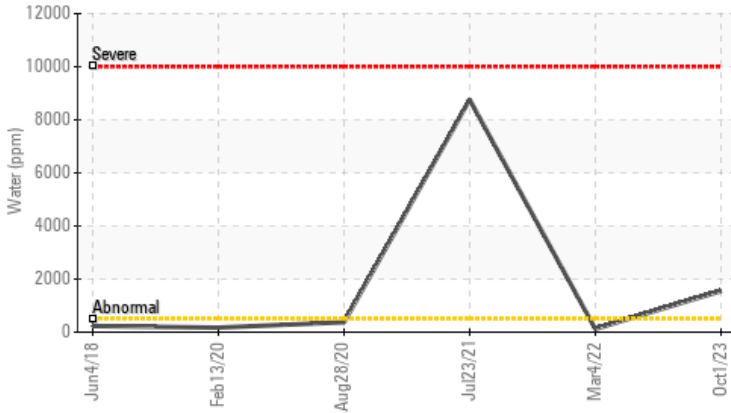
Machine Id
KAESER ASD 25 3480517 (S/N 1388)

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	ATTENTION	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ 0.155	0.012	▲ 0.876
ppm Water	ppm	ASTM D6304	>500	▲ 1550	120.5	▲ 8760
Debris	scalar	*Visual	NONE	▲ HEAVY	NONE	▲ MODER

Customer Id: UNIROCMA
 Sample No.: KCPA006607
 Lab Number: 05967031
 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
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

04 Mar 2022 Diag: Don Baldrige

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



23 Jul 2021 Diag: Angela Borella

WATER



We advise that you follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. 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. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



28 Aug 2020 Diag: Jonathan Hester

NORMAL



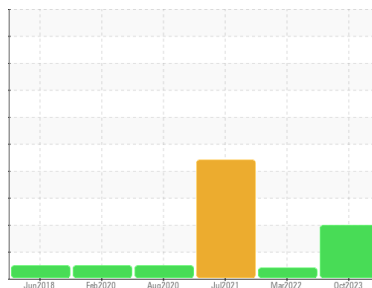
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER ASD 25 3480517 (S/N 1388)

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

There is a light concentration of water present in the oil. High 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			KCPA006607	KCP38529	KCP41661
Sample Date	Client Info			01 Oct 2023	04 Mar 2022	23 Jul 2021
Machine Age	hrs	Client Info		34320	30475	28941
Oil Age	hrs	Client Info		0	4000	1773
Oil Changed	Client Info			N/A	Changed	Not Chngd
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	1
Copper	ppm	ASTM D5185m	>50	15	4	3
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

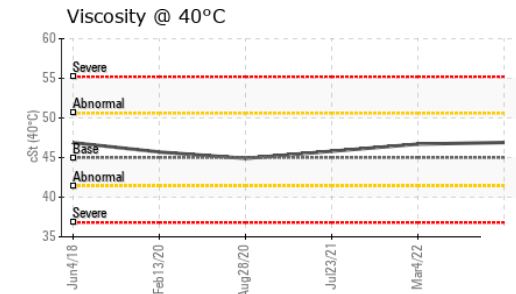
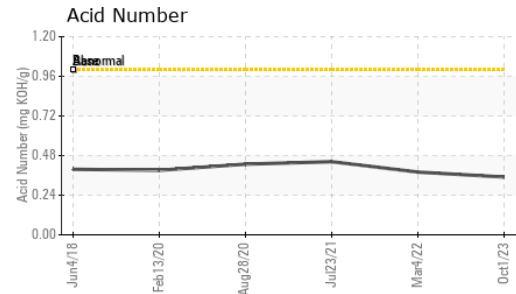
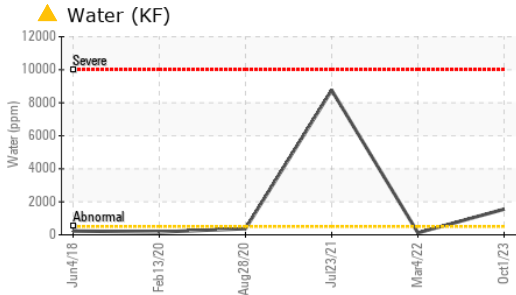
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	14
Barium	ppm	ASTM D5185m	90	0	3	13
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	100	12	61	58
Calcium	ppm	ASTM D5185m	0	2	0	1
Phosphorus	ppm	ASTM D5185m	0	2	3	9
Zinc	ppm	ASTM D5185m	0	33	5	6
Sulfur	ppm	ASTM D5185m	23500	22060	18726	20700

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	1	2
Sodium	ppm	ASTM D5185m		0	16	5
Potassium	ppm	ASTM D5185m	>20	2	3	2
Water	%	ASTM D6304	>0.05	▲ 0.155	0.012	▲ 0.876
ppm Water	ppm	ASTM D6304	>500	▲ 1550	120.5	▲ 8760

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	4766	---
Particles >6µm		ASTM D7647	>1300	---	1202	---
Particles >14µm		ASTM D7647	>80	---	▲ 81	---
Particles >21µm		ASTM D7647	>20	---	13	---
Particles >38µm		ASTM D7647	>4	---	0	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 17/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.35	0.38	0.443

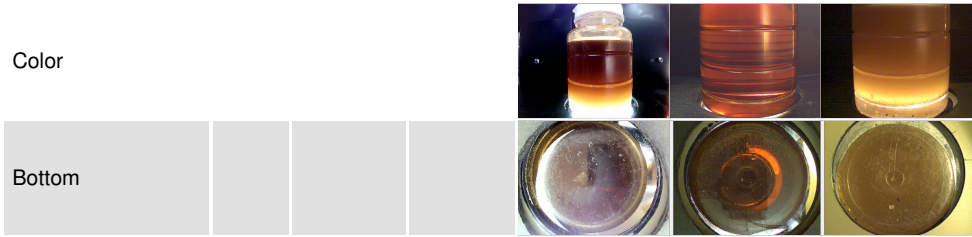
OIL ANALYSIS REPORT



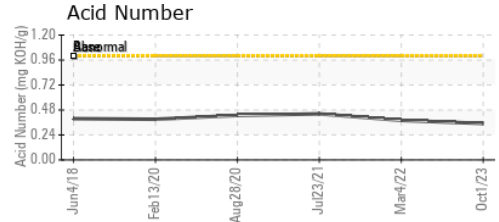
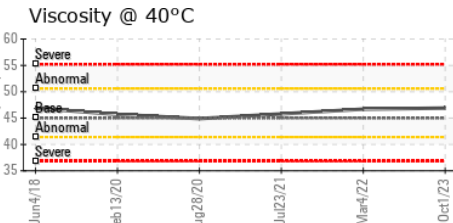
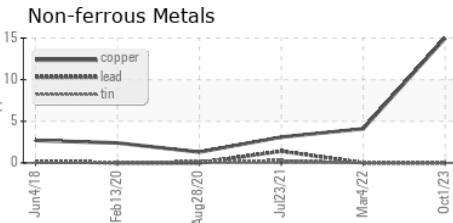
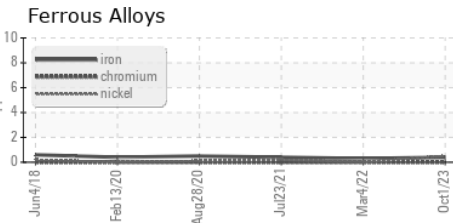
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ HEAVY	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	▲ 10.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	46.9	46.7	45.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA006607 **Received** : 02 Oct 2023
Lab Number : 05967031 **Diagnosed** : 06 Oct 2023
Unique Number : 10673582 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

UNITED HVAC
 333 WEYMOUTH ST
 ROCKLAND, MA
 US 02370
 Contact: M. SCOLARO
 mscolaro@united-mech.com

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: