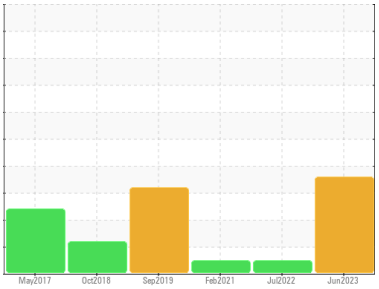
PROBLEM SUMMARY

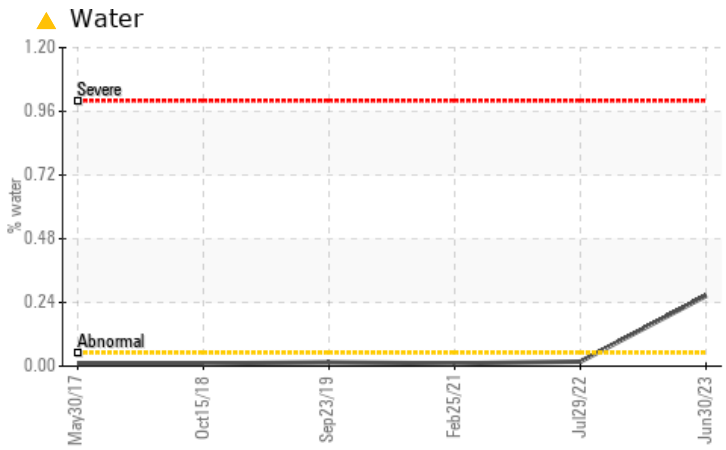
Sample Rating Trend



WATER

Machine Id
KAESER AIRCENTER SK 15 4488634 (S/N 2619)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- LTR)

COMPONENT CONDITION SUMMARY



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**	NORMAL	NORMAL
Water	%	ASTM D6304	>0.05	▲ **0.265**	0.017	0.010
ppm Water	ppm	ASTM D6304	>500	▲ **2650**	173.2	106.7
White Metal	scalar	*Visual	NONE	▲ **HEAVY**	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	NORML

Customer Id: CESWAS
Sample No.: KCPA004243
Lab Number: 05903795
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@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

29 Jul 2022 Diag: Don Baldridge

NORMAL

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

view report

25 Feb 2021 Diag: Angela Borella

NORMAL

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. 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

23 Sep 2019 Diag: Jonathan Hester

DIRT

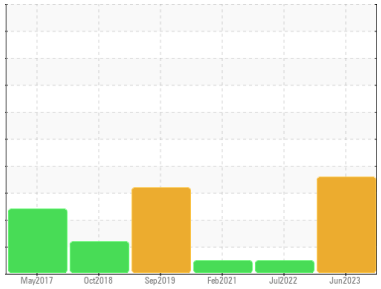
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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



WATER

Machine Id
KAESER AIRCENTER SK 15 4488634 (S/N 2619)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- LTR)

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
High concentration of visible metal present. All component wear rates are normal.

Contamination
There is a light concentration of water present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KCPA004243**	KCP48352	KCP34950
Sample Date		Client Info		**30 Jun 2023**	29 Jul 2022	25 Feb 2021
Machine Age	hrs	Client Info		**48253**	44117	37804
Oil Age	hrs	Client Info		**0**	6313	6185
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**<1**	0	0
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**	0	<1
Aluminum	ppm	ASTM D5185m	>10	**<1**	0	0
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**2**	7	7
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	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m	90	**43**	13	18
Calcium	ppm	ASTM D5185m	2	**1**	0	0
Phosphorus	ppm	ASTM D5185m		**1**	4	0
Zinc	ppm	ASTM D5185m		**0**	7	2
Sulfur	ppm	ASTM D5185m		**23171**	16581	15668

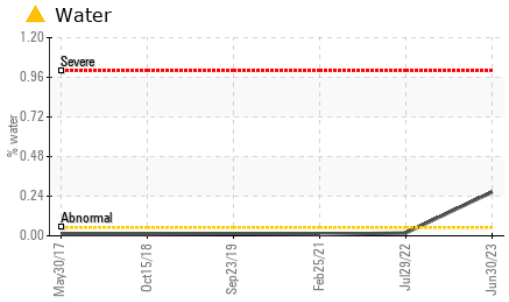
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	0	4
Sodium	ppm	ASTM D5185m		**15**	8	11
Potassium	ppm	ASTM D5185m	>20	**1**	0	1
Water	%	ASTM D6304	>0.05	▲ **0.265**	0.017	0.010
ppm Water	ppm	ASTM D6304	>500	▲ **2650**	173.2	106.7

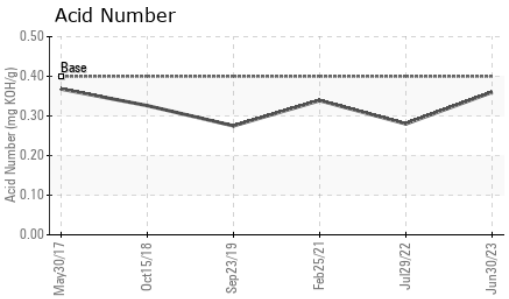
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	916	3554
Particles >6µm		ASTM D7647	>1300	**---**	314	992
Particles >14µm		ASTM D7647	>80	**---**	30	68
Particles >21µm		ASTM D7647	>20	**---**	4	17
Particles >38µm		ASTM D7647	>4	**---**	1	0
Particles >71µm		ASTM D7647	>3	**---**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**---**	17/15/12	17/13

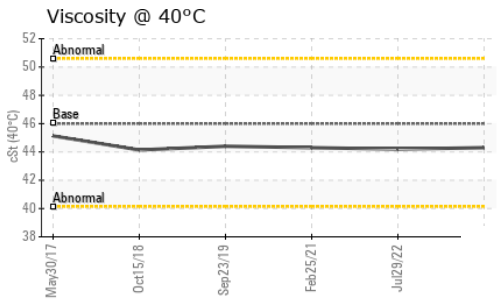
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.36**	0.28	0.339

KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

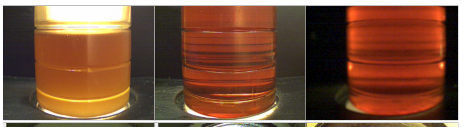
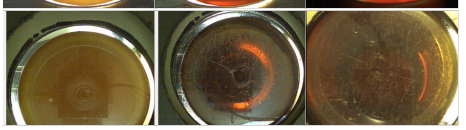




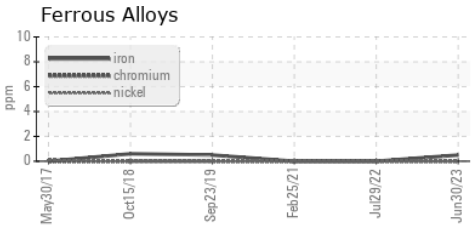


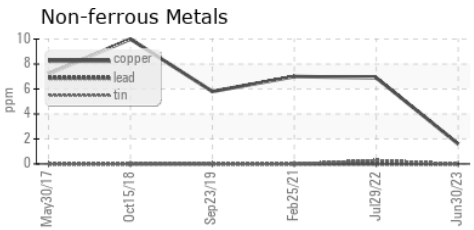
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ **HEAVY**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt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

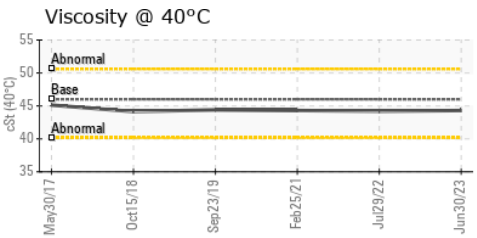
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**44.3**	44.2	44.3

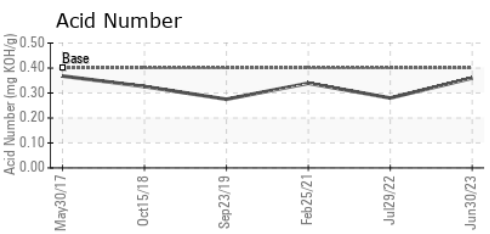
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004243 **Received** : 20 Jul 2023
Lab Number : 05903795 **Diagnosed** : 24 Jul 2023
Unique Number : 10565151 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

C & E SERVICES INC - WATERGATE CENTRAL PLANT
2500 VIRGINIA AVE NW
WASHINGTON, DC
US 20037
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: