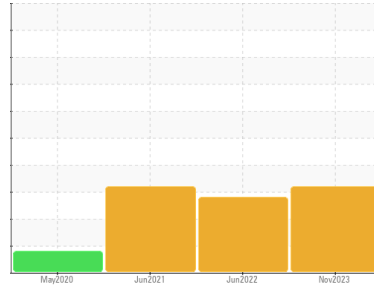




PROBLEM SUMMARY

Sample Rating Trend



WATER



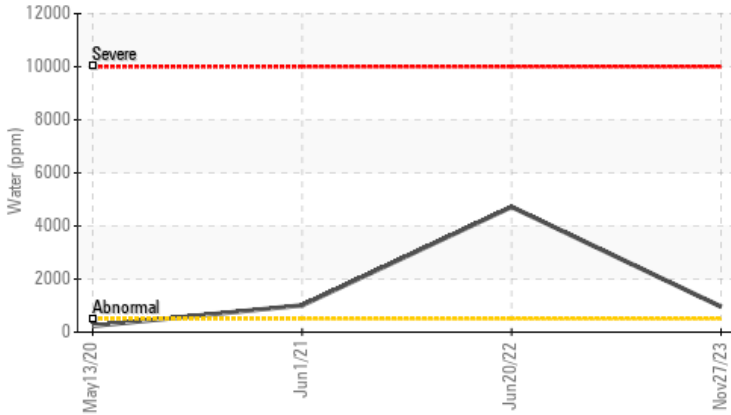
Machine Id
KAESER 6933052

Component
Compressor

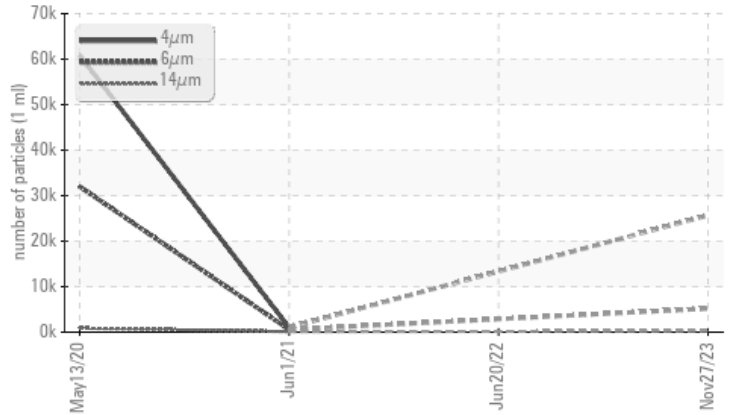
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



▲ Particle Trend



RECOMMENDATION

The filter change at the time of sampling has been noted. 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	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ 0.096	▲ 0.472	▲ 0.101
ppm Water	ppm	ASTM D6304	>500	▲ 960	▲ 4720	▲ 1010
Particles >6µm		ASTM D7647	>1300	▲ 5197	---	▲ 559
Particles >14µm		ASTM D7647	>80	▲ 218	---	▲ 95
Particles >21µm		ASTM D7647	>20	▲ 55	---	▲ 32
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ 20/15	---	▲ 16/14

Customer Id: CLAMAR
Sample No.: KCPA010895
Lab Number: 06029396
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

20 Jun 2022 Diag: Don Baldrige

WATER



Oil and 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 recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid.

view report



01 Jun 2021 Diag: Angela Borella

WATER



Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Appearance is hazy. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

view report



13 May 2020 Diag: Don Baldrige

ISO



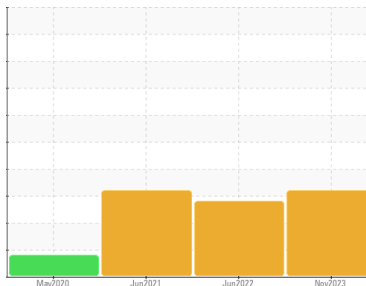
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
KAESER 6933052

Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. 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 high amount of particulates 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. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KCPA010895	KCP41366	KCP35541
Sample Date	Client Info			27 Nov 2023	20 Jun 2022	01 Jun 2021
Machine Age	hrs	Client Info		5640	3970	1763
Oil Age	hrs	Client Info		0	2000	1400
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
Chromium	ppm	ASTM D5185m	>10	<1	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	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	6	6	4
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

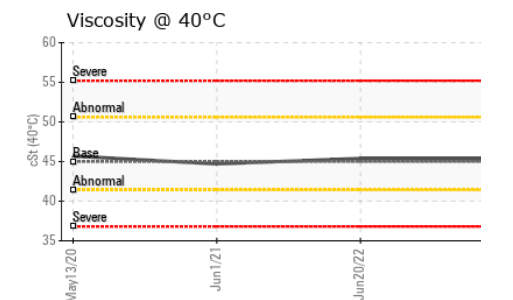
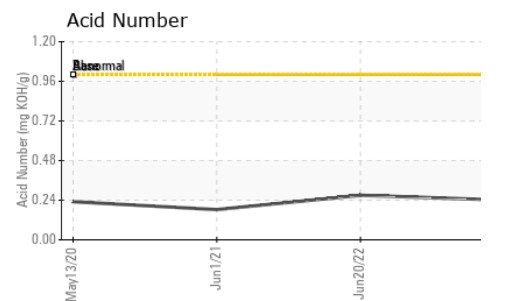
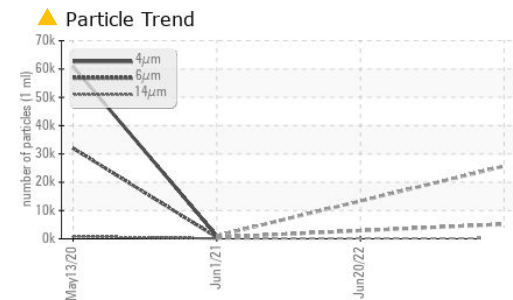
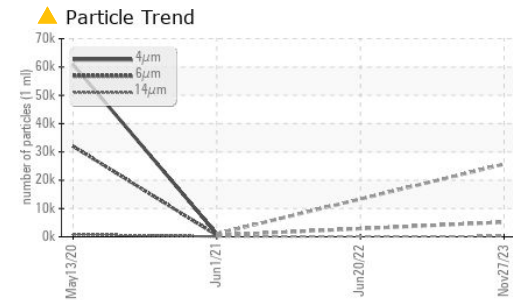
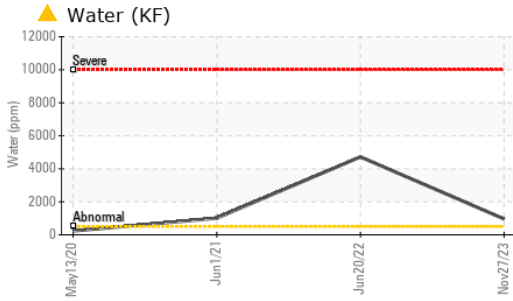
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	1	13
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	100	19	19	17
Calcium	ppm	ASTM D5185m	0	2	1	0
Phosphorus	ppm	ASTM D5185m	0	0	8	8
Zinc	ppm	ASTM D5185m	0	40	30	24
Sulfur	ppm	ASTM D5185m	23500	20461	19152	18504

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	2	3
Sodium	ppm	ASTM D5185m		2	10	9
Potassium	ppm	ASTM D5185m	>20	1	0	1
Water	%	ASTM D6304	>0.05	▲ 0.096	▲ 0.472	▲ 0.101
ppm Water	ppm	ASTM D6304	>500	▲ 960	▲ 4720	▲ 1010

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		25681	---	1027
Particles >6µm		ASTM D7647	>1300	▲ 5197	---	559
Particles >14µm		ASTM D7647	>80	▲ 218	---	▲ 95
Particles >21µm		ASTM D7647	>20	▲ 55	---	▲ 32
Particles >38µm		ASTM D7647	>4	3	---	5
Particles >71µm		ASTM D7647	>3	1	---	1
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ 20/15	---	▲ 16/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.24	0.27	0.183

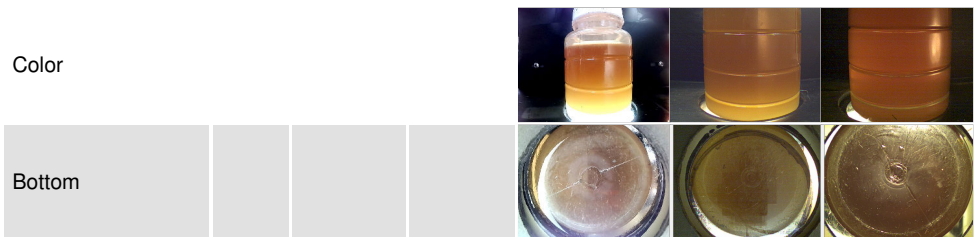
OIL ANALYSIS REPORT



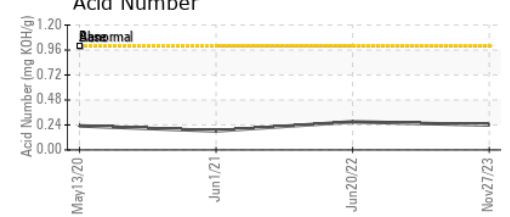
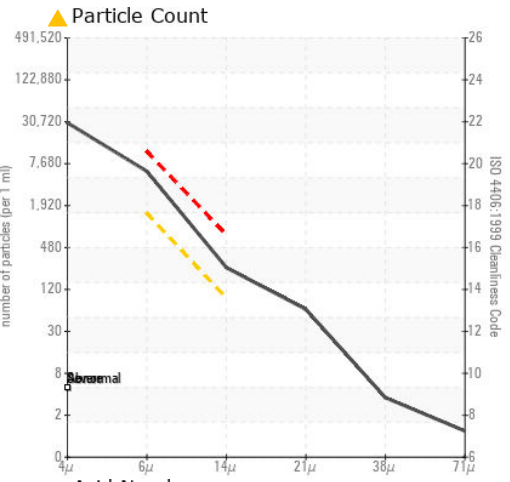
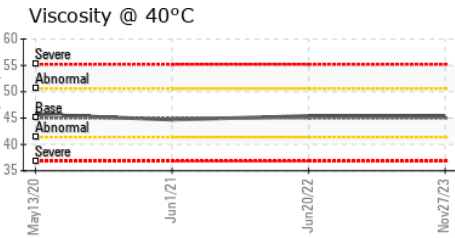
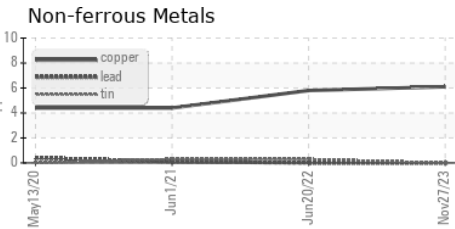
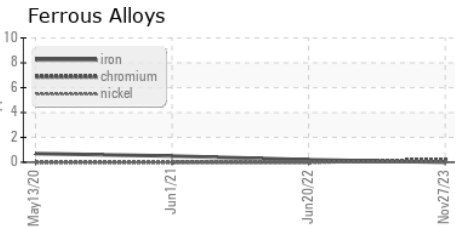
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	45.3	45.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA010895 **Received** : 08 Dec 2023
Lab Number : 06029396 **Diagnosed** : 15 Dec 2023
Unique Number : 10779187 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CLARK TRANSPORTATION
 12940 PITTSBURG RD
 MARION, IL
 US 62959
 Contact: C. EMERY
 cemery@clark-trans.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)