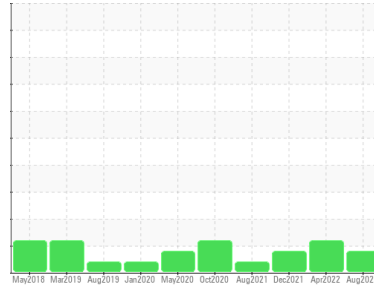


PROBLEM SUMMARY

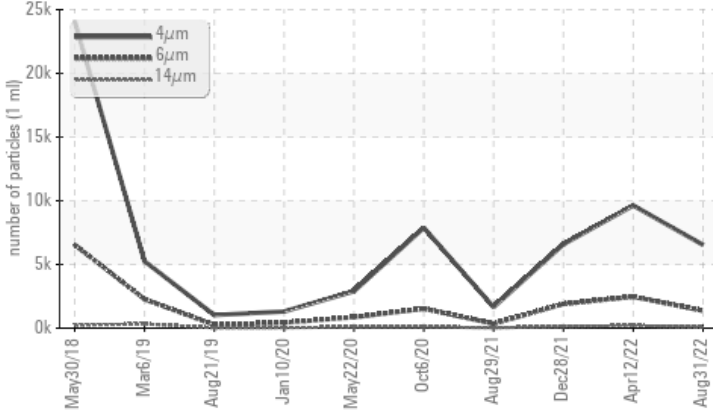
Sample Rating Trend



Machine Id
KAESER AS 30T 6266615 (S/N 1097)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	ATTENTION
Particles >6µm	ASTM D7647 >1300	▲ 1368	▲ 2471	▲ 1900
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/18/13	▲ 18/15	▲ 18/14

Customer Id: KROCOLOH
Sample No.: KCP37389
Lab Number: 05640378
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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

12 Apr 2022 Diag: Doug Bogart

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



28 Dec 2021 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. The oil 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



29 Aug 2021 Diag: Don Baldrige

VISCOSITY



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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

view report

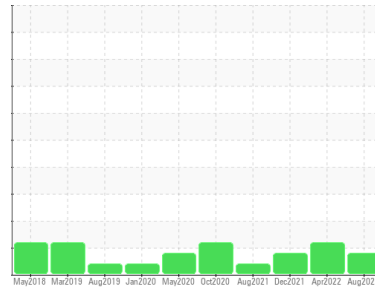




Machine Id
KAESER AS 30T 6266615 (S/N 1097)

Component
Compressor

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



DIAGNOSIS

Recommendation

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.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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	history 1	history 2
Sample Number			KCP37389	KCP37488	KCP43387
Sample Date			31 Aug 2022	12 Apr 2022	28 Dec 2021
Machine Age	hrs		37900	34571	33202
Oil Age	hrs		1913	1700	3299
Oil Changed			Changed	Changed	Changed
Sample Status			ATTENTION	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<1	1	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	<1
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	1	1	<1
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	1	1	2
Tin	ppm	ASTM D5185m >10	0	0	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	history 1	history 2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	0	42	38
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	63	96	78
Calcium	ppm	ASTM D5185m 0	0	2	0
Phosphorus	ppm	ASTM D5185m 0	<1	5	2
Zinc	ppm	ASTM D5185m 0	7	0	0
Sulfur	ppm	ASTM D5185m 23500	18755	18996	20297

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	2	1	1
Sodium	ppm	ASTM D5185m	10	19	30
Potassium	ppm	ASTM D5185m >20	2	3	5
Water	%	ASTM D6304 >0.05	0.028	0.032	0.031
ppm Water	ppm	ASTM D6304 >500	280.3	329.1	310.6

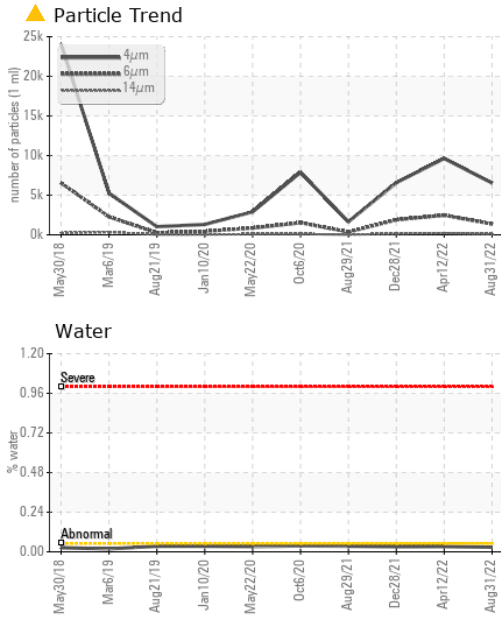
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		6536	9630	6585
Particles >6µm	ASTM D7647	>1300	▲ 1368	▲ 2471	▲ 1900
Particles >14µm	ASTM D7647	>80	77	▲ 201	▲ 129
Particles >21µm	ASTM D7647	>20	16	▲ 46	19
Particles >38µm	ASTM D7647	>4	1	1	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/13	▲ 18/15	▲ 18/14

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.38	0.41	0.413

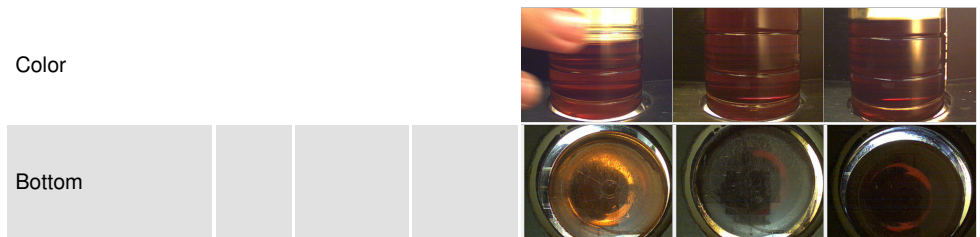
OIL ANALYSIS REPORT



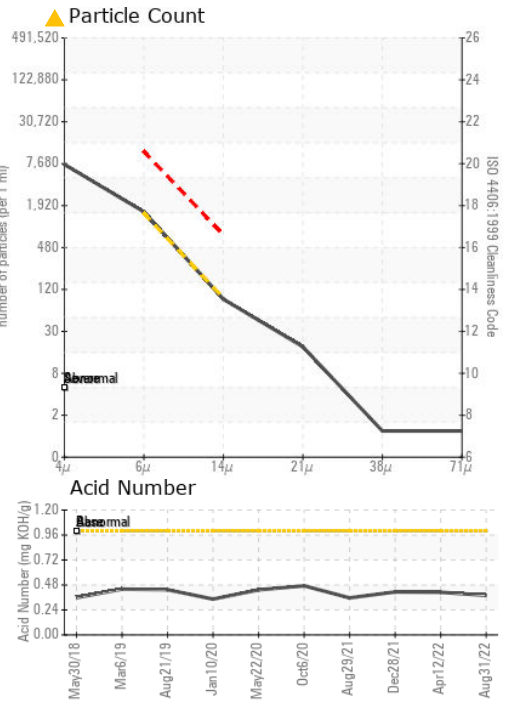
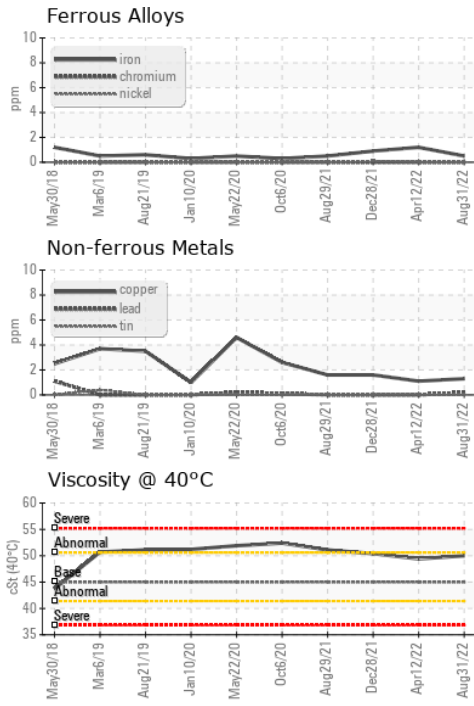
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 45	50.0	49.4	50.4

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP37389 **Received** : 13 Sep 2022
Lab Number : 05640378 **Diagnosed** : 15 Sep 2022
Unique Number : 10129908 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

KROGER COLUMBUS CENTRAL FILL
 2270 RICKENBACKER PKWY W
 COLUMBUS, OH
 USA 43217
 Contact: DENISE BRINTLINGER
 denise.brintlinger@kroger.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: