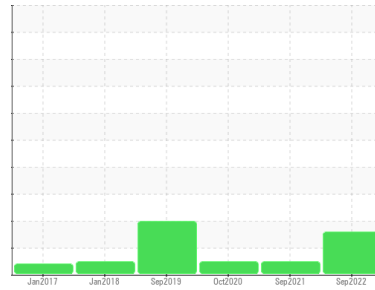


PROBLEM SUMMARY

Sample Rating Trend



ISO



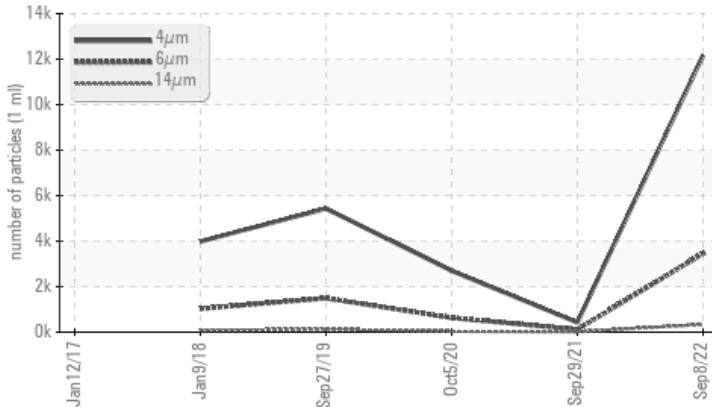
Machine Id
4395199 (S/N 1124)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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			ABNORMAL	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 3453	117	628
Particles >14µm	ASTM D7647	>80	▲ 337	13	33
Particles >21µm	ASTM D7647	>20	▲ 52	4	8
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/16	14/11	16/12

Customer Id: RRBGIR
Sample No.: KCP33348
Lab Number: 05646605
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

29 Sep 2021 Diag: Don Baldrige

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



05 Oct 2020 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](#)



27 Sep 2019 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](#)

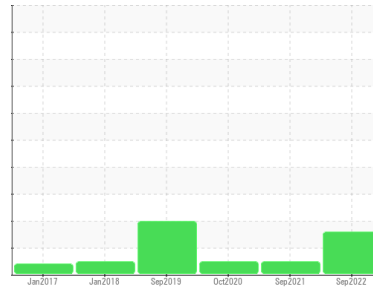




Machine Id
4395199 (S/N 1124)

Component
Compressor

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



DIAGNOSIS

▲ Recommendation

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 high amount of particulates 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			KCP33348	KCP36485	KCP30436
Sample Date			08 Sep 2022	29 Sep 2021	05 Oct 2020
Machine Age	hrs		35486	32136	30626
Oil Age	hrs		3300	1510	3000
Oil Changed			Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	0	<1	<1
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	0
Aluminum	ppm ASTM D5185m	>10	<1	3	<1
Lead	ppm ASTM D5185m	>10	0	0	0
Copper	ppm ASTM D5185m	>50	3	2	<1
Tin	ppm ASTM D5185m	>10	0	0	0
Antimony	ppm ASTM D5185m		---	<1	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	<1	11
Barium	ppm ASTM D5185m	90	<1	8	32
Molybdenum	ppm ASTM D5185m		0	0	0
Manganese	ppm ASTM D5185m		0	<1	<1
Magnesium	ppm ASTM D5185m	90	48	75	89
Calcium	ppm ASTM D5185m	2	<1	<1	1
Phosphorus	ppm ASTM D5185m		3	4	2
Zinc	ppm ASTM D5185m		5	0	4
Sulfur	ppm ASTM D5185m		19886	16857	16997

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<1	0	1
Sodium	ppm ASTM D5185m		24	20	13
Potassium	ppm ASTM D5185m	>20	2	3	1
Water	% ASTM D6304	>0.05	0.025	0.037	0.028
ppm Water	ppm ASTM D6304	>500	251.4	379.7	285.8

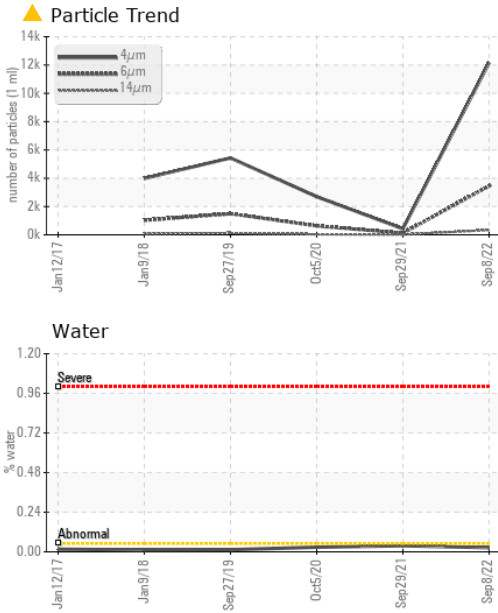
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		12164	425	2699
Particles >6µm	ASTM D7647	>1300	▲ 3453	117	628
Particles >14µm	ASTM D7647	>80	▲ 337	13	33
Particles >21µm	ASTM D7647	>20	▲ 52	4	8
Particles >38µm	ASTM D7647	>4	4	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/16	14/11	16/12

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	0.4	0.27	0.336	0.337

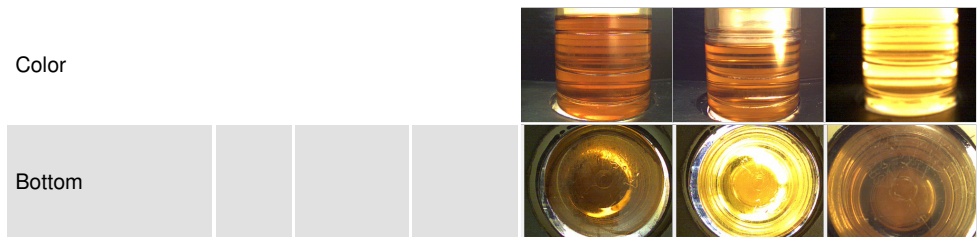
OIL ANALYSIS REPORT



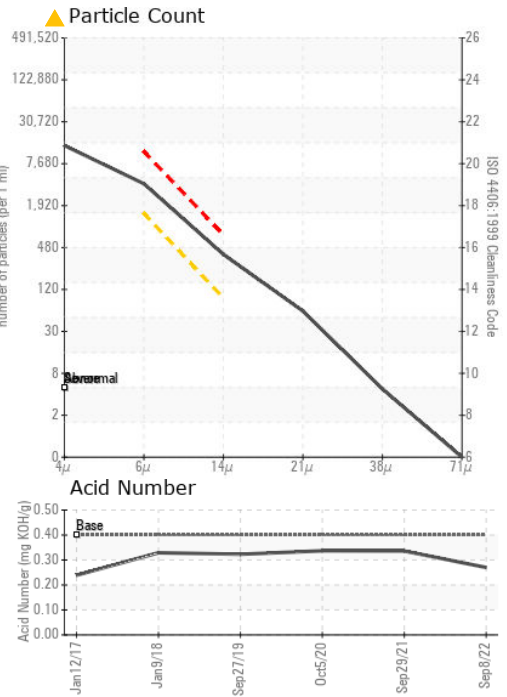
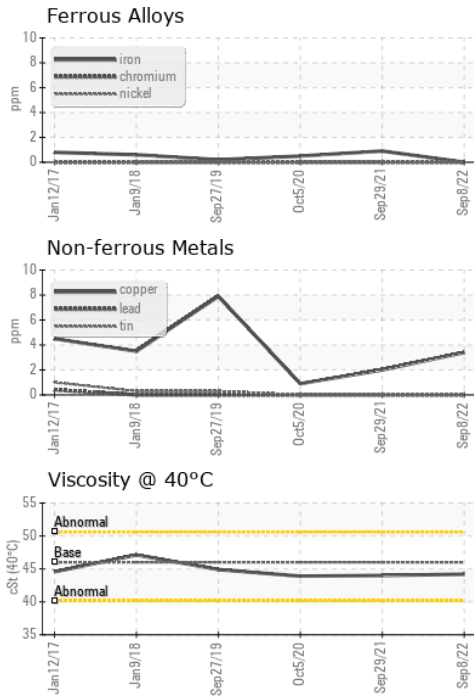
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	44.0	43.9

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP33348 **Received** : 20 Sep 2022
Lab Number : 05646605 **Diagnosed** : 22 Sep 2022
Unique Number : 10141144 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

R & R BINDERY
 499 RACHEL RD
 GIRARD, IL
 USA 62640
 Contact: TERRY CASTLEMAN

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: (217)627-2143

F: