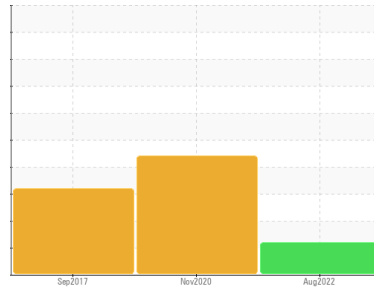


PROBLEM SUMMARY

Sample Rating Trend



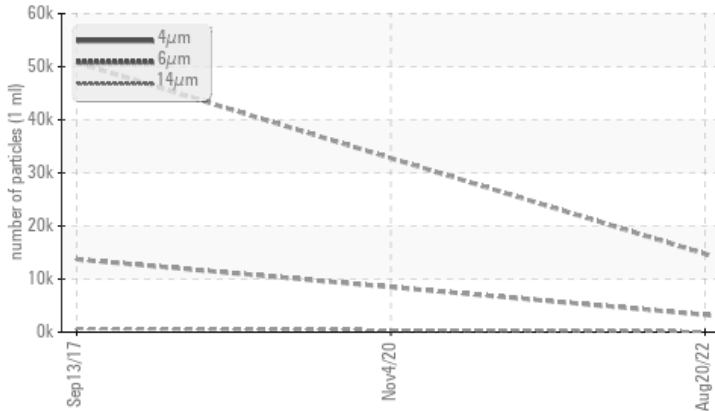
ISO



Machine Id
AIR CENTER SM 10 4867348 (S/N 1605)
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 3270	---	▲ 13719
Particles >14µm	ASTM D7647	>80	▲ 126	---	▲ 680
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/14	---	▲ 21/17

Customer Id: CARCHAKCP
Sample No.: KCP49398
Lab Number: 05627491
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

04 Nov 2020 Diag: Angela Borella

WATER



Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours 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. There is a light concentration of water present in the oil. Free water present. There is a moderate amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



13 Sep 2017 Diag: Don Baldrige

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

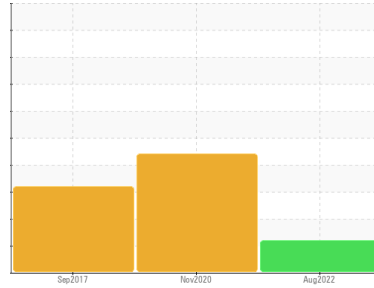
[view report](#)



Machine Id
AIR CENTER SM 10 4867348 (S/N 1605)

Component
Compressor

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



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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			KCP49398	KCP31641	KCP04146
Sample Date			20 Aug 2022	04 Nov 2020	13 Sep 2017
Machine Age	hrs		33296	26621	14453
Oil Age	hrs		5000	3000	0
Oil Changed			Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

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		0	<1	0
Titanium	ppm ASTM D5185m		0	0	0
Silver	ppm ASTM D5185m		<1	<1	0
Aluminum	ppm ASTM D5185m	>25	1	0	<1
Lead	ppm ASTM D5185m	>25	<1	<1	0
Copper	ppm ASTM D5185m	>50	18	33	26
Tin	ppm ASTM D5185m	>15	<1	<1	0
Antimony	ppm ASTM D5185m		---	<1	0
Vanadium	ppm ASTM D5185m		0	0	0
Cadmium	ppm ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m	0	0	<1	0
Barium	ppm ASTM D5185m	90	0	0	<1
Molybdenum	ppm ASTM D5185m	0	0	0	<1
Manganese	ppm ASTM D5185m		0	<1	0
Magnesium	ppm ASTM D5185m	100	5	32	16
Calcium	ppm ASTM D5185m	0	0	<1	<1
Phosphorus	ppm ASTM D5185m	0	4	<1	3
Zinc	ppm ASTM D5185m	0	17	43	33
Sulfur	ppm ASTM D5185m	23500	17728	17156	8069

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	24	17	▲ 36
Sodium	ppm ASTM D5185m		<1	2	9
Potassium	ppm ASTM D5185m	>20	<1	<1	3
Water	% ASTM D6304	>0.1	0.007	▲ 0.222	0.014
ppm Water	ppm ASTM D6304	>1000	71.9	▲ 2220	140

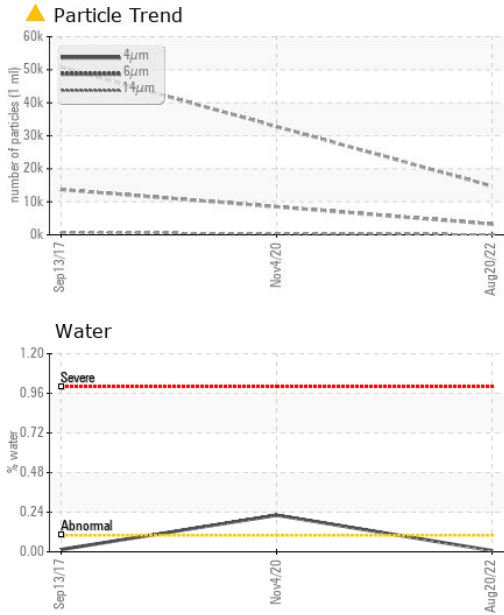
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		14744	---	50806
Particles >6µm	ASTM D7647	>1300	▲ 3270	---	▲ 13719
Particles >14µm	ASTM D7647	>80	▲ 126	---	▲ 680
Particles >21µm	ASTM D7647	>20	14	---	▲ 126
Particles >38µm	ASTM D7647	>4	0	---	▲ 9
Particles >71µm	ASTM D7647	>3	0	---	1
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/14	---	▲ 21/17

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.0	0.40	0.393	0.407

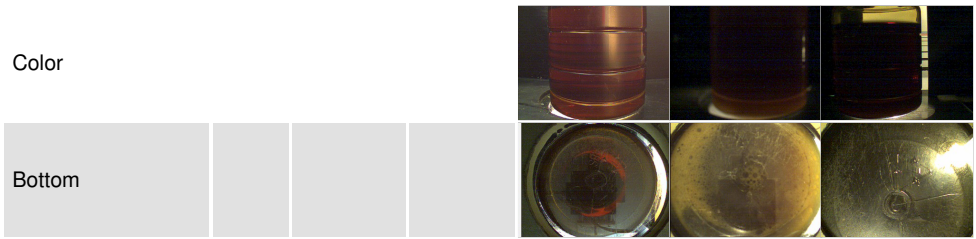
OIL ANALYSIS REPORT



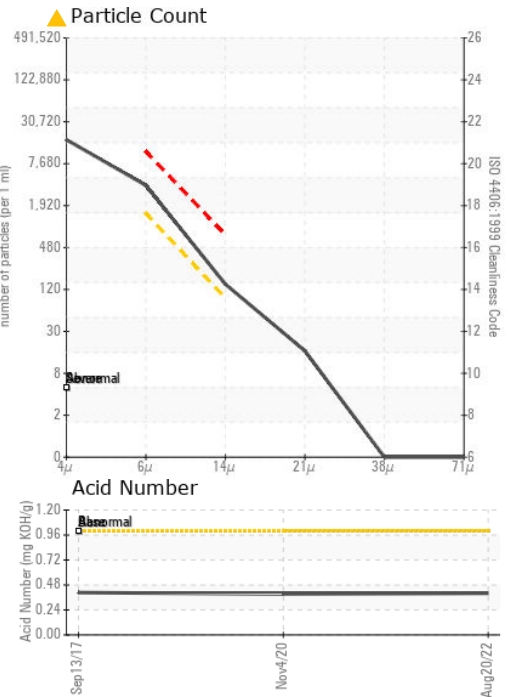
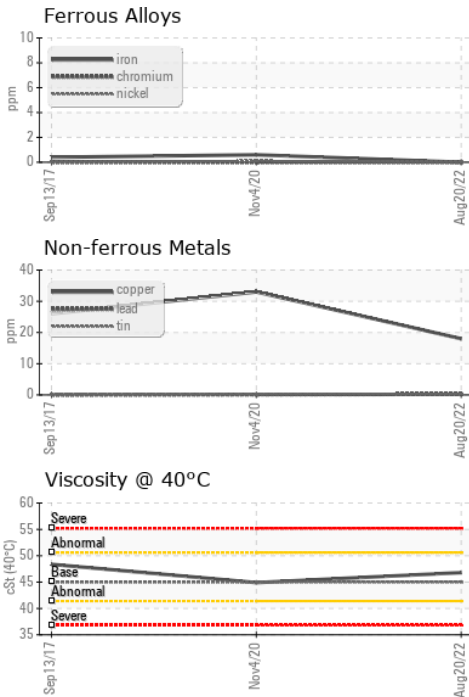
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%
Free Water	scalar	*Visual		▲ 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	46.8	44.9

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. : KCP49398 **Received** : 25 Aug 2022
Lab Number : 05627491 **Diagnosed** : 28 Aug 2022
Unique Number : 10112012 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CAROLINA FRESH, LLC
 2229 W ARBORS DR
 CHARLOTTE, NC
 USA 28262
 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)