

PROBLEM SUMMARY

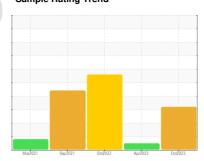
Sample Rating Trend

WATER

KAESER AIR CENTER SM 7.5 6756186 (S/N 1045)

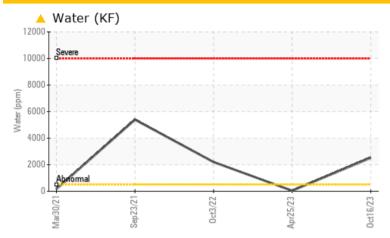
Compressor

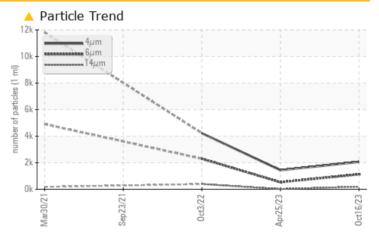
KAESER SIGMA (OEM) S-460 (--- GAL)





COMPONENT CONDITION SUMMARY





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 1	TEST RE	SULTS				
Sample Status				ABNORMAL	NORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	△ 0.252	0.004	△ 0.220
ppm Water	ppm	ASTM D6304	>500	2520	43.5	<u>^</u> 2200
Particles >14µm		ASTM D7647	>80	<u> </u>	17	△ 392
Particles >21µm		ASTM D7647	>20	<u> </u>	3	<u></u> 132
Particles >38µm		ASTM D7647	>4	<u> </u>	0	<u>^</u> 20
Oil Cleanliness		ISO 4406 (c)	>/17/13	18/17/15	18/16/11	19/18/16

Customer Id: ZEVSOM Sample No.: KC101724 Lab Number: 06015079 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 ihester@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

25 Apr 2023 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. 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.



03 Oct 2022 Diag: Doug Bogart

WATER



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. All component wear rates are normal. There is a high amount of particulates present in the oil. Free water present. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



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23 Sep 2021 Diag: Doug Bogart

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. 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. All component wear rates are normal. Free water present. 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. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



WATER

KAESER AIR CENTER SM 7.5 6756186 (S/N 1045)

Compressor

KAESER SIGMA (OEM) S-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.

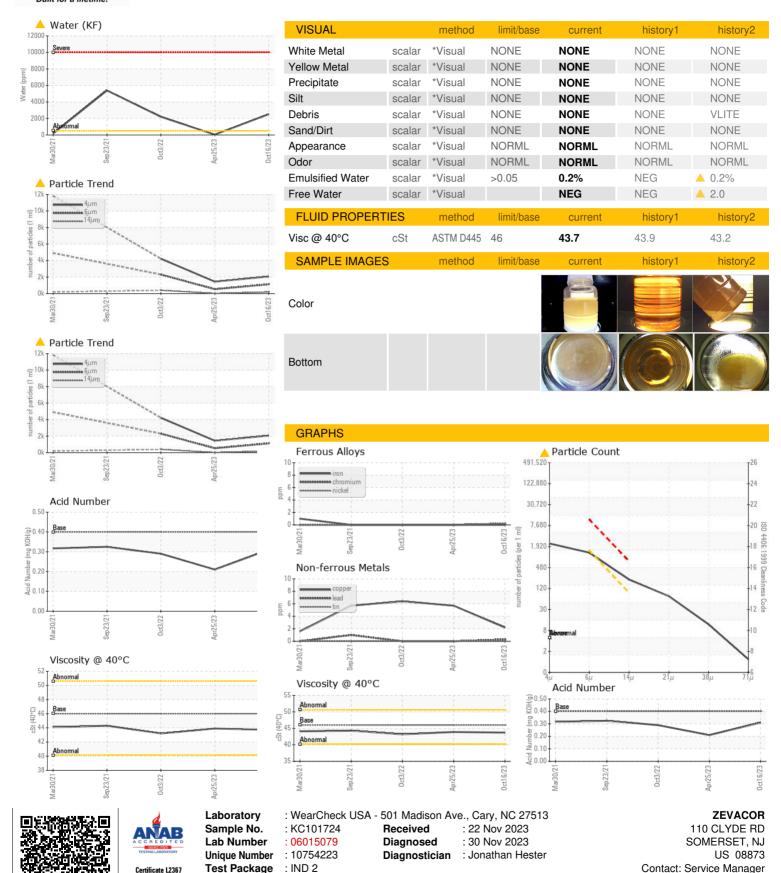
Fluid Condition

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

		Mar2021	Sep 2021	Oct2022 Apr2023	Oct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC101724	KC112471	KC95986
Sample Date		Client Info		16 Oct 2023	25 Apr 2023	03 Oct 2022
Machine Age	hrs	Client Info		21713	20220	18960
Oil Age	hrs	Client Info		1500	2897	1623
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	0
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	2	6	6
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Manganese Magnesium	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m ASTM D5185m	90	<1 18	0 7	<1 9
•	ppm	ASTM D5185m	90			
Magnesium	ppm ppm	ASTM D5185m		18	7	9
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m		18 3	7 0	9
Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		18 3 3	7 0 2	9 0 2
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2	18 3 3 12	7 0 2 43	9 0 2 27
Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 limit/base	18 3 3 12 current	7 0 2 43 history1	9 0 2 27 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 limit/base	18 3 3 12 current	7 0 2 43 history1	9 0 2 27 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >25 >20	18 3 3 12 current 4 2	7 0 2 43 history1 0 6	9 0 2 27 history2 <1 2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	18 3 3 12 current 4 2 2	7 0 2 43 history1 0 6	9 0 2 27 history2 <1 2 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	2 limit/base >25 >20 >0.05	18 3 3 12 current 4 2 2 10.252	7 0 2 43 history1 0 6 1 0.004	9 0 2 27 history2 <1 2 0 • 0.220
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500	18 3 3 12 current 4 2 2 2 0.252 2520	7 0 2 43 history1 0 6 1 0.004 43.5	9 0 2 27 history2 <1 2 0 • 0.220 • 2200
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	limit/base >25 >20 >0.05 >500 limit/base	18 3 3 12	7 0 2 43 history1 0 6 1 0.004 43.5 history1	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base	18 3 3 12	7 0 2 43 history1 0 6 1 0.004 43.5 history1	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2 4224
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80	18 3 3 12	7 0 2 43 history1 0 6 1 0.004 43.5 history1 1437 530	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2 4224 ▲ 2301
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80	18 3 3 12 current 4 2 2 0.252	7 0 2 43 history1 0 6 1 0.004 43.5 history1 1437 530 17	9 0 2 27 history2 <1 2 0 △ 0.220 △ 2200 history2 4224 △ 2301 △ 392
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	18 3 3 12	7 0 2 43 history1 0 6 1 0.004 43.5 history1 1437 530 17 3	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2 4224 ▲ 2301 ▲ 392 ▲ 132
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	18 3 3 12 current 4 2 2 △ 0.252 △ 2520 current 2062 1123 △ 191 △ 64 △ 10	7 0 2 43 history1 0 6 1 0.004 43.5 history1 1437 530 17 3 0	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2 4224 ▲ 2301 ▲ 392 ▲ 132 ▲ 20
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 METHOD ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	18 3 3 12 current 4 2 2 △ 0.252 △ 2520 current 2062 1123 △ 191 △ 64 △ 10 1	7 0 2 43 history1 0 6 1 0.004 43.5 history1 1437 530 17 3 0 0	9 0 2 27 history2 <1 2 0 ▲ 0.220 ▲ 2200 history2 4224 ▲ 2301 ▲ 392 ▲ 132 ▲ 20 ▲ 2



OIL ANALYSIS REPORT



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)

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