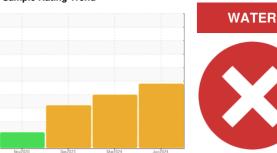


PROBLEM SUMMARY

Sample Rating Trend



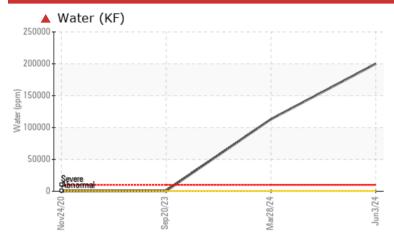
Machine Id

KAESER 7337513

Component Compressor

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you follow the water drain-off procedure for this component. We advise an early resample to confirm this situation.

PROBLEMATIC	TEST RE	SULTS				
Sample Status				SEVERE	SEVERE	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ >2.0	1 1.3	△ 0.064
ppm Water	ppm	ASTM D6304	>500	200000	1 13000	△ 640
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE
Emulsified Water	scalar	*Visual	>0.05	0.2%	▲ 0.2%	0.2%

Customer Id: OLDMANOH Sample No.: KC123144 Lab Number: 06208242 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@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	
Water Drain-off			?	We advise that you follow the water drain-off procedure for this component.	
Resample			?	We advise an early resample to confirm this situation.	

HISTORICAL DIAGNOSIS

28 Mar 2024 Diag: Doug Bogart

WATER



We advise that you follow the water drain-off procedure for this component. We advise an early resample to confirm this situation.{not applicable} Appearance is unacceptable. Sample consists almost entirely of an emulsified solution. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.



WATER



20 Sep 2023 Diag: Jonathan Hester

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. There is a light 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.







24 Nov 2020 Diag: Angela Borella

The 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.





OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

KAESER 7337513

Component Compressor

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

DIAGNOSIS

Recommendation

We advise that you follow the water drain-off procedure for this component. We advise an early resample to confirm this situation.

▲ Contamination

Appearance is unacceptable. Sample consists almost entirely of an emulsified solution. There is a high concentration of water present in the oil. There is a high amount of visible silt present in the sample.

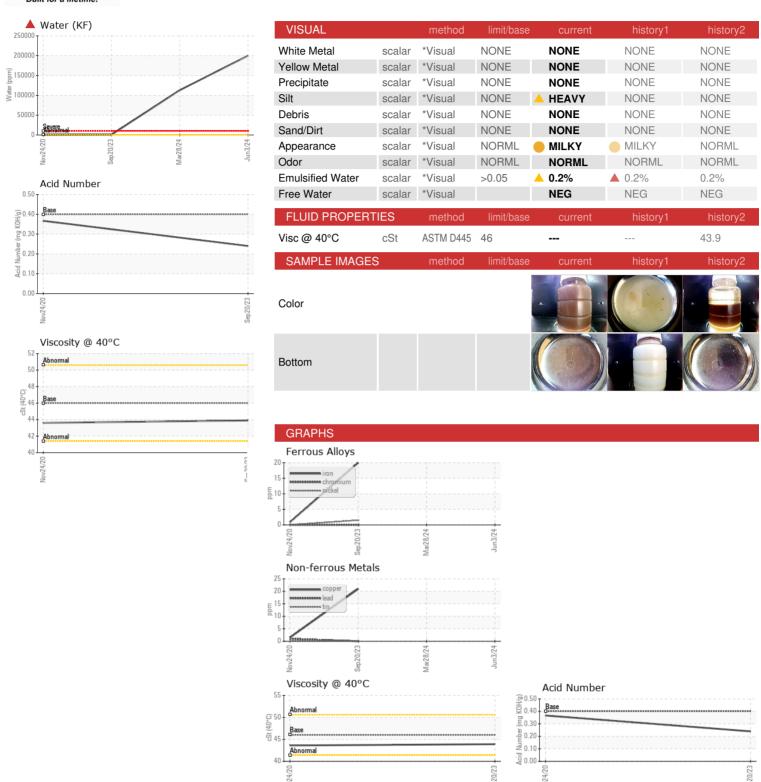
Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

Sample Date Client Info 03 Jun 2024 28 Mar 2024 20 Sep 2023			Nov202	0 Sep2023	Mar2024 J	un2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 03 Jun 2024 28 Mar 2024 20 Sep 2023	Sample Number		Client Info		KC123144	KC125868	KC121459
Machine Age hrs	•		Client Info		03 Jun 2024	28 Mar 2024	20 Sep 2023
Oil Age hrs Client Info N/A N/A	Machine Age	hrs	Client Info		1612	1576	
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 20 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m >3 2 Titanium ppm ASTM D5185m >3 0 ASIVER ppm ASTM D5185m >2 0 0 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 21 Tin ppm ASTM D5185m >50 0 Antimony ppm ASTM D5185m 0 0 Cadrium ppm ASTM D5185m<	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 20 Chromium ppm ASTM D5185m >3 0 Nickel ppm ASTM D5185m >3 2 Titanium ppm ASTM D5185m >3 0 ASIVER ppm ASTM D5185m >2 0 0 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 21 Tin ppm ASTM D5185m >50 0 Antimony ppm ASTM D5185m 0 0 Cadrium ppm ASTM D5185m<	Oil Changed		Client Info		N/A	N/A	N/A
Chromium	Sample Status				SEVERE	SEVERE	ABNORMAL
Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >50 0 Lead ppm ASTM D5185m >50 21 Tin ppm ASTM D5185m >10 0 Antimony ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 AAthinony ppm ASTM D5185m 0 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 90 0 Magnesium ppm ASTM D5185m 90	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>50			20
Titanium	Chromium	ppm	ASTM D5185m	>10			0
Silver	Nickel	ppm	ASTM D5185m	>3			2
Aluminum ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 21 Tin ppm ASTM D5185m >10 0 Antimony ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Manganesium ppm ASTM D5185m 5 Calcium ppm ASTM D5185m 5 Zinc ppm ASTM D5185m 6 Z	Titanium	ppm	ASTM D5185m	>3			0
Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >50 21 Tin ppm ASTM D5185m >10 0 Antimony ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 90 0 Manganese ppm ASTM D5185m 0 Manganesium ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 2 5 Calcium ppm ASTM D5185m 2 6	Silver	ppm	ASTM D5185m	>2			0
Copper	Aluminum	ppm	ASTM D5185m	>10			0
Tin ppm ASTM D5185m	Lead	ppm	ASTM D5185m	>10			0
Antimony	Copper	ppm	ASTM D5185m	>50			21
Antimony	Tin		ASTM D5185m	>10			0
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Barium ppm ASTM D5185m 90 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m Magnesium ppm ASTM D5185m 90 5 Calcium ppm ASTM D5185m 90 5 Calcium ppm ASTM D5185m 2 0 Phosphorus ppm ASTM D5185m 2 0 Zinc ppm ASTM D5185m 8 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 4	Antimony	ppm	ASTM D5185m				
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 Marium ppm ASTM D5185m 90 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m Magnesium ppm ASTM D5185m 90 -1 Calcium ppm ASTM D5185m 2 0 6 6 8 8 8 8 CONTAMINANTS method limit/base current history1 history2	Vanadium		ASTM D5185m				0
Boron ppm ASTM D5185m	Cadmium		ASTM D5185m				0
Barium ppm ASTM D5185m 90 00 Manganese ppm ASTM D5185m 90 01 Magnesium ppm ASTM D5185m 90 01 Magnesium ppm ASTM D5185m 90 5 Calcium ppm ASTM D5185m 2 0 Phosphorus ppm ASTM D5185m 2 0 Phosphorus ppm ASTM D5185m 05 Zinc ppm ASTM D5185m 05 Zinc ppm ASTM D5185m 05 Sodium ppm ASTM D5185m >25 05 Sodium ppm ASTM D5185m >20 05 Sodium ppm ASTM D5185m >20 05 Sodium ppm ASTM D5185m >20 05 Water 96 ASTM D6304 >0.05	ADDITIVES		method	limit/base	current	history1	history2
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Sodium ppm ASTM D5185m 4 Potassium ppm ASTM D5185m >20 2 Water % ASTM D6304 >0.05 ▲ >2.0 ▲ 11.3 ▲ 0.064 ppm Water ppm ASTM D6304 >500 ▲ 200000 ▲ 113000 ▲ 640 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 — 3020 Particles >6μm ASTM D7647 >80 — — 105 Particles >21μm ASTM D7647 >20 — — 22 Particles >38μm ASTM D7647 >4 — — 0 Particles >71μm ASTM D7647 >3 — — 0 Oil Cleanliness ISO 4406 (c) >/17/13 — 21/19/14 FLUID DEGRADATION method limit/base current history1 history2 </td <td>Silicon</td> <td>nnm</td> <td>ASTM D5185m</td> <td>>25</td> <th></th> <td></td> <td><i>-</i>1</td>	Silicon	nnm	ASTM D5185m	>25			<i>-</i> 1
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Particles >6μm ASTM D7647 >1300 Δ 3020 Particles >14μm ASTM D7647 >80 Δ 105 Particles >21μm ASTM D7647 >20 Δ 22 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/14 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647				
Particles >14μm ASTM D7647 >80 Δ 105 Particles >21μm ASTM D7647 >20 Δ 22 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/14 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300			△ 3020
Particles >21μm ASTM D7647 >20 Δ 22 Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/14 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm						
Particles >38μm ASTM D7647 >4 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/14 FLUID DEGRADATION method limit/base current history1 history2	•						
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Oil Cleanliness ISO 4406 (c) >/17/13							
	Oil Cleanliness						
	FLUID DEGRADA	TION _	method_	limit/base	current	history1	history2
Alora Harrison (7.114) highorig Alorin Booto O.T U.24	Acid Number (AN)	mg KOH/g	ASTM D8045	0.4			0.24



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: KC123144 Lab Number : 06208242 Unique Number : 11075703

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Jun 2024 **Tested** : 20 Jun 2024

Diagnosed : 20 Jun 2024 - Doug Bogart

OLD DOMINION 2101 AIRPORT RD W MANSFIELD, OH US 44903

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)

T:

F: