

PROBLEM SUMMARY

Sample Rating Trend



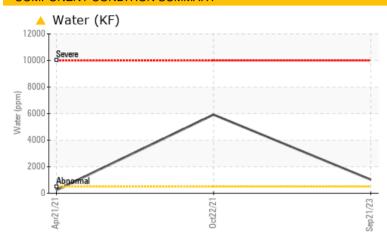
KAESER 7261315

Component

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 T	PROBLEMATIC TEST RESULTS							
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
Water	%	ASTM D6304	>0.05	△ 0.103	△ 0.592	0.022		
ppm Water	ppm	ASTM D6304	>500	1030	<u></u> 5920	228.1		

Customer Id: TRINORNJ Sample No.: KC112279 Lab Number: 05966304 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

22 Oct 2021 Diag: Don Baldridge

WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. The 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 high amount of visible silt present in the sample. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid.



21 Apr 2021 Diag: Jonathan Hester

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 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



WATER



KAESER 7261315

Component

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 light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

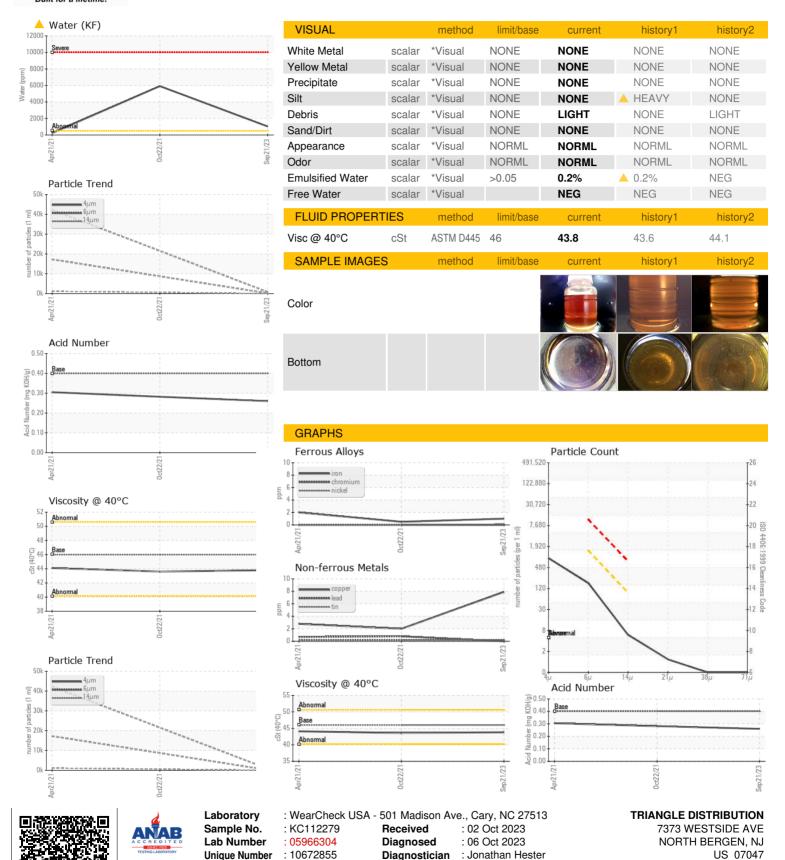
Fluid Condition

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

Sample Number Client Info KC112279 KC90046 KC93331			Ар	2021	0ct2021 Sep20	123	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info	Sample Number		Client Info		KC112279	KC90046	KC93331
Dil Changed hrs	Sample Date		Client Info		21 Sep 2023	22 Oct 2021	21 Apr 2021
Cilient Info	Machine Age	hrs	Client Info		6018	2051	1000
MEAR METALS method limit/base current history1 ABNORMAL Iron ppm ASTM D5185m >50 1 <1	Oil Age	hrs	Client Info		956	1051	1000
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 1 <1	Oil Changed		Client Info		Not Changd	Not Changd	Changed
Iron	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >3 <1 0 0 Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >20 0 <1 <1 Aluminum ppm ASTM D5185m >10 0 0 0 Lead ppm ASTM D5185m >10 0 <1 <1 Copper ppm ASTM D5185m >10 0 <1 <1 Antimony ppm ASTM D5185m >10 <1 <1 <1 Antimony ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 <1 Barium ppm ASTM D5185m 0 0 0	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >3	Iron	ppm	ASTM D5185m	>50	1	<1	2
Titanium	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>3	<1	0	0
Aluminum ppm ASTM D5185m >10 0 0 0 0 0 0 0 0 0	Titanium	ppm	ASTM D5185m	>3	0	0	0
Lead ppm ASTM D5185m >10 0 <1 <1 Copper ppm ASTM D5185m >50 8 2 3 Tin ppm ASTM D5185m >10 <1 <1 <1 Antimony ppm ASTM D5185m —— 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 <1 1 Barium ppm ASTM D5185m 90 2 0 0 Molybdenum ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 90 45 37 60 Calcium ppm ASTM D5185m 2 2 2 0 4	Silver	ppm	ASTM D5185m	>2	0	<1	<1
Copper ppm ASTM D5185m >50 8 2 3 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>10	0	0	0
Tin	Lead	ppm	ASTM D5185m	>10	0	<1	<1
Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 0 Barium ppm ASTM D5185m 90 2 0 0 Molybdenum ppm ASTM D5185m 0 <1 <1 Manganese ppm ASTM D5185m 0 <1 <1 Manganesium ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 Calcium ppm ASTM D5185m 2 2 0 <4 Phosphorus ppm ASTM D5185m 3 5 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>50</td> <td>8</td> <td>2</td> <td>3</td>	Copper	ppm	ASTM D5185m	>50	8	2	3
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 1 Barium ppm ASTM D5185m 90 2 0 0 Molybdenum ppm ASTM D5185m 0 0 <1 <1 Manganese ppm ASTM D5185m 0 <1 <1 <1 Magnesium ppm ASTM D5185m 90 45 37 60 Calcium ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 3 5 6 6 Zinc ppm ASTM D5185m 11 0 0 0 CONTAMINANTS method limit/base current history1 history2	Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 90 2 0 0 Molybdenum ppm ASTM D5185m 0 0 <1 <1 Manganese ppm ASTM D5185m 0 45 37 60 Calcium ppm ASTM D5185m 90 45 37 60 Calcium ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 3 5 6 6 Zinc ppm ASTM D5185m 3 5 6 6 Silicon ppm ASTM D5185m 11 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon <td>Antimony</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td></td> <td>0</td> <td>0</td>	Antimony	ppm	ASTM D5185m			0	0
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 90 2 0 0 Molybdenum ppm ASTM D5185m 0 0 <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 <1 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m		0	0	<1
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 90 45 37 60 Calcium ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 3 5 6 Zinc ppm ASTM D5185m 11 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Barium	ppm	ASTM D5185m	90	2	0	0
Magnesium ppm ASTM D5185m 90 45 37 60 Calcium ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 2 2 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 <1 0 Sodium ppm ASTM D5185m >25 <1 <1 0 Sodium ppm ASTM D5185m >20 3 2 1 Potassium ppm ASTM D5185m >20 3 2 1 Water % ASTM D5185m >20 3 2 1 Water % ASTM D5185m >20 3 2 1	Molybdenum	ppm	ASTM D5185m		0	0	<1
Calcium ppm ASTM D5185m 2 2 0 4 Phosphorus ppm ASTM D5185m 3 5 6 Zinc ppm ASTM D5185m 11 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus ppm ASTM D5185m 3 5 6 Zinc ppm ASTM D5185m 11 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Magnesium	ppm	ASTM D5185m	90	45	37	60
Zinc ppm ASTM D5185m 11 0 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Calcium	ppm	ASTM D5185m	2	2	0	4
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Phosphorus	ppm	ASTM D5185m		3	5	6
Silicon ppm ASTM D5185m >25 <1 <1 0 Sodium ppm ASTM D5185m 19 4 13 Potassium ppm ASTM D5185m 20 3 2 1 Water	Zinc	ppm	ASTM D5185m		11	0	0
Sodium ppm ASTM D5185m 19 4 13 Potassium ppm ASTM D5185m >20 3 2 1 Water % ASTM D6304 >0.05 ▲ 0.103 ▲ 0.592 0.022 ppm Water ppm ASTM D6304 >500 ▲ 1030 ▲ 5920 228.1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 ▲ 17241 Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >71μm ASTM D7647 >3 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 △ 6 Particles >71μm ASTM D7647 >3 0 △ 6 Oi	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 3 2 1 Water % ASTM D6304 >0.05 ▲ 0.103 ▲ 0.592 0.022 opm Water ppm ASTM D6304 >500 ▲ 1030 ▲ 5920 228.1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 ▲ 17241 Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17	Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Water % ASTM D6304 >0.05 ▲ 0.103 ▲ 0.592 0.022 ppm Water ppm ASTM D6304 >500 ▲ 1030 ▲ 5920 228.1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 ▲ 17241 Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		19	4	13
oppm Water ppm ASTM D6304 >500 ▲ 1030 ▲ 5920 228.1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 ▲ 17241 Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	3	2	1
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 Δ 17241 Particles >14μm ASTM D7647 >80 5 Δ 1106 Particles >21μm ASTM D7647 >20 1 Δ 208 Particles >38μm ASTM D7647 >4 0 Δ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 Δ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>0.05	△ 0.103	△ 0.592	0.022
Particles >4μm ASTM D7647 787 42252 Particles >6μm ASTM D7647 >1300 152 Δ 17241 Particles >14μm ASTM D7647 >80 5 Δ 1106 Particles >21μm ASTM D7647 >20 1 Δ 208 Particles >38μm ASTM D7647 >4 0 Δ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 Δ 21/17 FLUID DEGRADATION method limit/base current history1 history2	ppm Water	ppm	ASTM D6304	>500	1030	▲ 5920	228.1
Particles >6μm ASTM D7647 >1300 152 ▲ 17241 Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >80 5 ▲ 1106 Particles >21μm ASTM D7647 >20 1 ▲ 208 Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647		787		42252
Particles >21μm ASTM D7647 >20 1 Δ 208 Particles >38μm ASTM D7647 >4 0 Δ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 Δ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	152		<u>▲</u> 17241
Particles >38μm ASTM D7647 >4 0 ▲ 6 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>80	5		▲ 1106
Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 Δ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>20	1		△ 208
Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>4	0		<u>^</u> 6
Oil Cleanliness ISO 4406 (c) >/17/13 17/14/10 ▲ 21/17 FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		0
	Oil Cleanliness		ISO 4406 (c)	>/17/13	17/14/10		2 1/17
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.26 0.282 0.305	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.26	0.282	0.305



OIL ANALYSIS REPORT



Certificate L2367

Test Package

: IND 2

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:

Contact: Service Manager