

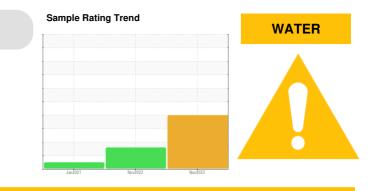
PROBLEM SUMMARY

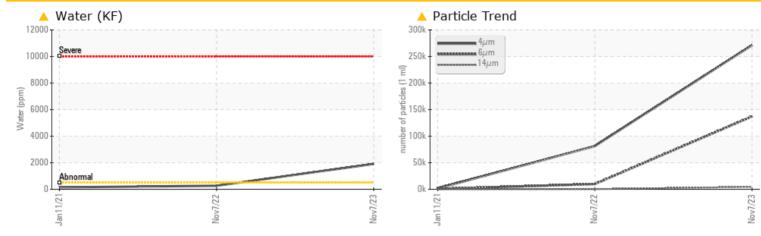
KAESER ASD 25 6946811 (S/N 1069)

Compressor

KAESER SIGMA (OEM) M-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 TEST RESULTS

FRODLEWATIO I		50L15				
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	A 0.191	0.026	0.014
ppm Water	ppm	ASTM D6304	>500	A 1910	267.2	144.4
Particles >6µm		ASTM D7647	>1300	<u> </u>	▲ 9802	625
Particles >14µm		ASTM D7647	>80	4472	<u> </u>	24
Particles >21µm		ASTM D7647	>20	🔺 267	<u> </u>	6
Particles >38µm		ASTM D7647	>4	1 1	4	0
Particles >71µm		ASTM D7647	>3	<u> </u>	0	0
Oil Cleanliness		ISO 4406 (c)	>/17/13	A 25/24/19	🔺 24/20/15	16/12

Customer Id: PAPWAS Sample No.: KCPA009406 Lab Number: 06013353 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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

07 Nov 2022 Diag: Jonathan Hester



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.



11 Jan 2021 Diag: Doug Bogart



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.





OIL ANALYSIS REPORT

Machine Id KAESER ASD 25 6946811 (S/N 1069) Component

Compressor Fluic

KAESER SIGMA (OEM) M-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

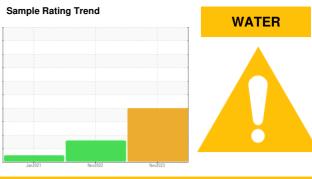
All component wear rates are normal.

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.



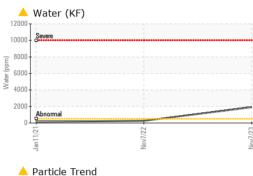
Machine Age hrs Client Info 4266 4996 523 Oil Age irrs Client Info 0 4473 523 Oil Changed Canaged Info N/A Changed Changed Changed Sample Status n n ABNORMAL NORMAL NORMAL WEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05185m >50 <1 1 3 Chromium ppm ASTM 05185m >10 0 0 0 Nickel ppm ASTM 05185m >2 0 0 0 Silver ppm ASTM 05185m >10 4 2 8 Lead ppm ASTM 05185m >10 <1 0 <1 Antimony ppm ASTM 05185m 0 0 0 0 Cadamium ppm ASTM 05185m 0 0 0 0 Antimony </th <th>SAMPLE INFORM</th> <th>IATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info Q 4266 4996 523 Oil Ago hrs Client Info NA Changed Changed Sample Status Client Info NA Changed Changed NORMAL Sample Status n Na Changed NoRMAL NoRMAL NoRMAL WEAR METALS method imit/bas current history NoRMAL NoRMAL NoRMAL NoRMAL Iron ppm ASTM DS1650 >50 <1	Sample Number		Client Info		KCPA009406	KCP47191	KCP27231
Oil Age hrs Client Info 0 4473 523 Oil Changed Client Info NA Changed Changed Sample Status Imitbase current history1 Nistory2 Iron ppm ASTM D5185m >50 <1	Sample Date		Client Info		07 Nov 2023	07 Nov 2022	11 Jan 2021
Oil Changed Sample Status Client Info N/A ABNORMAL Changed ABNORMAL Changed ABNORMAL Changed ABNORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >50 <1	Machine Age	hrs	Client Info		4266	4996	523
Sample Status Image ABNORMAL ABNORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >50 <1	Oil Age	hrs	Client Info		0	4473	523
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1	Oil Changed		Client Info		N/A	Changed	Changed
Iron ppm ASTM D5185m >50 <1 1 3 Chromium ppm ASTM D5185m >3 <1	Sample Status				ABNORMAL	ABNORMAL	NORMAL
Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >3 <1 0 <1 Titanium ppm ASTM D5185m >2 0 0 0 Auminum ppm ASTM D5185m >10 4 2 8 Lead ppm ASTM D5185m >10 0 0 <1 Copper ppm ASTM D5185m >10 <1 0 <1 Antimony ppm ASTM D5185m >10 <1 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 0 Astm D5185m 0 0 0 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 0 1 1 1 8 Zinc ppm AST	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >3 <1 0 <1 Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >10 4 2 8 Lead ppm ASTM D5185m >10 0 0 <1	Iron	ppm	ASTM D5185m	>50	<1	1	3
Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >10 4 2 8 Lead ppm ASTM D5185m >10 0 0 <1	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 4 2 8 Lead ppm ASTM D5185m >10 0 0 <1	Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum ppm ASTM D5185m >10 4 2 8 Lead ppm ASTM D5185m >10 0 0 <1	Titanium	ppm	ASTM D5185m	>3	0	0	0
Lead ppm ASTM D5185m >10 0 0 <1 Copper ppm ASTM D5185m >50 11 7 <1	Silver	ppm	ASTM D5185m	>2	0	0	0
Copper ppm ASTM D5185m >50 11 7 <1 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>10	4	2	8
Copper ppm ASTM D5185m >50 11 7 <1 Tin ppm ASTM D5185m >10 <1	Lead		ASTM D5185m	>10	0	0	<1
Tin ppm ASTM D5185m >10 <1 0 <1 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 11 164 Magnese ppm ASTM D5185m 0 1 1 18 2 Calcium ppm ASTM D5185m 0 1 1 18 2 Sulfur ppm ASTM D5185m 0 164 100 2 2 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 ContrAMINANTS method limit/base current history1 history2 <t< td=""><td>Copper</td><td></td><td>ASTM D5185m</td><td>>50</td><th>11</th><td>7</td><td><1</td></t<>	Copper		ASTM D5185m	>50	11	7	<1
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Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 90 <1			ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 0 0 0 0 10 Barium ppm ASTM D5185m 90 <1 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 <1 Manganese ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 2 53 Sodium ppm ASTM D5185m >20 <1 2 53 Water % ASTM D6185m <	Cadmium	ppm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 0 0 0 10 Barium ppm ASTM D5185m 90 <1 0 0 Molybdenum ppm ASTM D5185m 0 0 0 <1 <1 Manganese ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 2 53 Water % ASTM D5185m >20 <1 2 53 Particles >4µm ASTM	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 90 <1 0 0 Molybdenum ppm ASTM D5185m 0 0 0 <1	Boron	ppm	ASTM D5185m	0	0		
Molybdenum ppm ASTM D5185m 0 0 0 <1 <1 Manganese ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Barium		ASTM D5185m	90	<1	0	0
Manganese ppm ASTM D5185m <1 <1 <1 <1 Magnesium ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 0 2 0 2 Phosphorus ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Molybdenum		ASTM D5185m	0	0	0	<1
Magnesium ppm ASTM D5185m 100 7 5 66 Calcium ppm ASTM D5185m 0 2 0 2 Phosphorus ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	-		ASTM D5185m		<1	<1	<1
Calcium ppm ASTM D5185m 0 2 0 2 Phosphorus ppm ASTM D5185m 0 1 1 18 Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	•		ASTM D5185m	100	7	5	66
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Zinc ppm ASTM D5185m 0 164 100 21 Sulfur ppm ASTM D5185m 23500 17840 21357 16817 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Phosphorus		ASTM D5185m	0	1	1	18
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1			ASTM D5185m	0	164	100	21
Silicon ppm ASTM D5185m >25 <1 1 <1 Sodium ppm ASTM D5185m 2 9 10 Potassium ppm ASTM D5185m >20 <1 2 53 Water % ASTM D6304 >0.05 ▲ 0.191 0.026 0.014 ppm Water ppm ASTM D6304 >500 ▲ 1910 267.2 144.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 271288 81426 1555 Particles >6µm ASTM D7647 >1300 ▲ 137078 9802 625 Particles >14µm ASTM D7647 >20 ▲ 267 ▲ 40 6 Particles >21µm ASTM D7647 >3 ▲ 2 0 0 Particles >71µm ASTM D7647 >3 ▲ 2 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 25/24/19 ▲ 24/20/15 16/12 FLUID DEGRADATION method limit/base current history1	Sulfur	ppm	ASTM D5185m	23500	17840	21357	16817
Silicon ppm ASTM D5185m >25 <1	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 2 9 10 Potassium ppm ASTM D5185m >20 <1	Silicon	ppm	ASTM D5185m	>25	د1		
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Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 25/24/19 ▲ 24/20/15 16/12 FLUID DEGRADATION method limit/base current history1 history2							
	FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045 1.0 0.38 0.44 0.268	Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	0.44	0.268

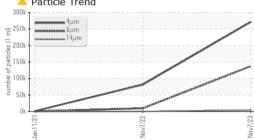
Contact/Location: SERVICE MANAGER ? - PAPWAS

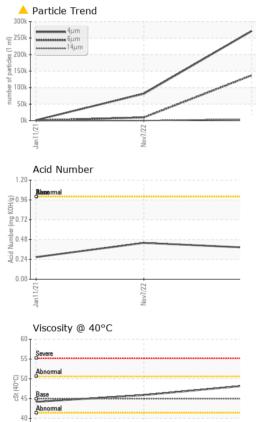
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OIL ANALYSIS REPORT







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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.4	45.9	44.2
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						

Bottom

