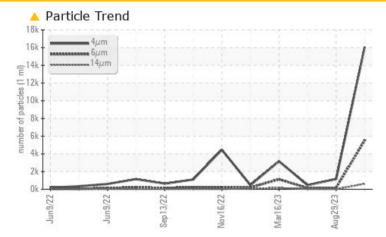


PROBLEM SUMMARY

Machine Id 6840713 (S/N 1277) Component

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

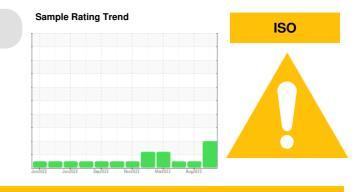
PROBLEMATIC T	EST RESULTS				
Sample Status			ABNORMAL	NORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	<u> </u>	172	138
Particles >14µm	ASTM D7647	>80	6 11	8	18
Particles >21µm	ASTM D7647	>20	<u> </u>	2	3
Particles >38µm	ASTM D7647	>4	🔺 11	0	0
Oil Cleanliness	ISO 4406 (c)	>/17/13	<u> </u>	17/15/10	16/14/11

Customer Id: STACHE Sample No.: KCPA007594 Lab Number: 05997389 Test Package: IND 2

Test Package: IND 2

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

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com



RECOMMENDED AC	TIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. 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.



view report

23 May 2023 Diag: Don Baldridge

29 Aug 2023 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. 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.

ISO

16 Mar 2023 Diag: Don Baldridge

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate 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 ISO

Machine Id 6840713 (S/N 1277) Component

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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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.

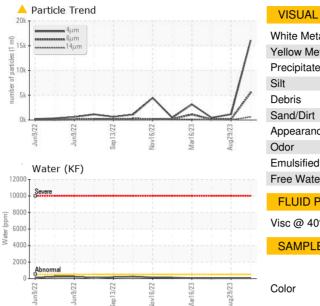
Sample Date Client Info 30 Oct 2023 29 Aug 2023 23 May 2023 Machine Age hrs Client Info 4671 6213 5423 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 history2 Iron ppm ASTM 05185n >50 0 <1 0 Nickel ppm ASTM 05185n >3 0 0 0 Silver ppm ASTM 05185n >10 7 8 4 Lead ppm ASTM 05185n >10 0 0 0 Vanadium ppm ASTM 05185n >10 0 0 0 Vanadium ppm ASTM 05185n >10 0 0 0 Adminim ppm ASTM 05185n >10 0 0 0 Readi	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Date Client Info 30 Oct 2023 29 Aug 2023 23 May 2023 Machine Age hrs Client Info 4671 6213 5423 Oil Age hrs Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >3 0 0 0 Nickel ppm ASTM 05185m >3 0 0 0 Silver ppm ASTM 05185m >10 0 0 0 Quandum ppm ASTM 05185m 10 0 0 0 Vanadum ppm ASTM 05185m 0 0 0 0 Adaminu ppm ASTM 05185m 0 0 0 0 Vanadum ppm ASTM 05185m 0 0 0 16 </td <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>KCPA007594</th> <td>KCPA002235</td> <td>KCPA001261</td>	Sample Number		Client Info		KCPA007594	KCPA002235	KCPA001261
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Image Client Info N/A N/A N/A N/A WEAR METALS method Imit/base current history2 history2 Iron ppm ASTM D5185m >50 0 <1	Sample Date		Client Info		30 Oct 2023	29 Aug 2023	23 May 2023
Oil Changed Client Info N/A N/A N/A N/A Sample Status Image Status Image Status Image Status Normal Norm	Machine Age	hrs	Client Info		4671	-	
Oil Changed Client Info N/A N/A N/A N/A Sample Status Image Status Image Status Image Status Normal Norm	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 0 <1	Oil Changed		Client Info		N/A	N/A	N/A
Iron ppm ASTM D5185m >50 0 <1	Sample Status				ABNORMAL	NORMAL	NORMAL
Ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 <1 0 <1 Nickel ppm ASTM D5185m >3 0 <1	Iron	ppm	ASTM D5185m	>50	0	<1	0
Titanium ppm ASTM D5185m >3 0 <1 0 Silver ppm ASTM D5185m >2 0 0 <1	Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Titanium ppm ASTM D5185m >3 0 <1 0 Silver ppm ASTM D5185m >2 0 0 <1	Nickel		ASTM D5185m	>3	0		0
Silver ppm ASTM D5185m >2 0 0 <1 Aluminum ppm ASTM D5185m >10 0 0 <1	Titanium		ASTM D5185m	>3	0	<1	0
Aluminum ppm ASTM D5185m >10 7 8 4 Lead ppm ASTM D5185m >10 0 0 <1	Silver			>2	0	0	<1
Lead ppm ASTM D5185m >10 0 0 <1 Copper ppm ASTM D5185m >50 <1	Aluminum		ASTM D5185m	>10	7	8	4
Copper ppm ASTM D5185m >50 <1 <1 0 Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 <1	Lead				0		
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Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 90 6 0 0 Maganese ppm ASTM D5185m 0 0 <1	Tin						
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 6 0 0 <1 Manganese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m 0 0 <1 <1 Magnese ppm ASTM D5185m 0 0 <10 <10 Calcium ppm ASTM D5185m 2 0 0 0 0 Calcium ppm ASTM D5185m 2 0 0 0 2 Sulfur ppm ASTM D5185m 146 193 200 2 Sulfur ppm ASTM D5185m 2 1 1 1 Solicon ppm ASTM D5185m 20 <th< td=""><td>Vanadium</td><td></td><td></td><td>-</td><th></th><td></td><td></td></th<>	Vanadium			-			
Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 90 6 0 0 Molybdenum ppm ASTM D5185m 0 0 <1	Cadmium						
Barium ppm ASTM D5185m 90 6 0 0 Molybdenum ppm ASTM D5185m 0 0 <1 <1 Manganese ppm ASTM D5185m 90 5 0 10 Calcium ppm ASTM D5185m 90 5 0 0 Calcium ppm ASTM D5185m 2 0 0 0 Calcium ppm ASTM D5185m 146 193 200 2 Zinc ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 <1 <1 Sodium ppm ASTM D5185m >20 2 1 <1 <1 Water % ASTM D5185m >20 2 1 <1 <1 Water ppm ASTM D6304 >0.05	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 90 5 0 10 Calcium ppm ASTM D5185m 90 5 0 0 Calcium ppm ASTM D5185m 2 0 0 0 Calcium ppm ASTM D5185m 146 193 200 Zinc ppm ASTM D5185m 146 193 200 Sulfur ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Boron	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 90 5 0 10 Calcium ppm ASTM D5185m 2 0 0 0 Phosphorus ppm ASTM D5185m 146 193 200 Zinc ppm ASTM D5185m 146 193 200 Sulfur ppm ASTM D5185m 2 0 5 Sulfur ppm ASTM D5185m 2 0 3 2 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Barium	ppm	ASTM D5185m	90	6	0	0
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Calcium ppm ASTM D5185m 2 0 0 0 Phosphorus ppm ASTM D5185m 146 193 200 Zinc ppm ASTM D5185m 2 0 5 Sulfur ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus ppm ASTM D5185m 146 193 200 Zinc ppm ASTM D5185m 2 0 5 Sulfur ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Magnesium	ppm	ASTM D5185m	90	5	0	10
Zinc ppm ASTM D5185m 2 0 5 Sulfur ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Calcium	ppm	ASTM D5185m	2	0	0	0
Sulfur ppm ASTM D5185m 1557 1872 2140 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 <1 <1 Sodium ppm ASTM D5185m >25 <1 <1 <1 <1 Sodium ppm ASTM D5185m >20 2 1 <1 <1 Potassium ppm ASTM D5185m >20 2 1 <1 <1 Water % ASTM D6304 >0.05 0.006 0.005 0.004 ppm Water ppm ASTM D6304 >500 60.8 55.9 49.0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 1300 5520 172 138 Particles >1µm ASTM D7647 >80 611 8 18 Particles >38µm ASTM D7647	Phosphorus	ppm	ASTM D5185m		146	193	200
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Zinc	ppm	ASTM D5185m		2	0	5
Silicon ppm ASTM D5185m >25 <1 <1 <1 Sodium ppm ASTM D5185m 0 3 2 Potassium ppm ASTM D5185m >20 2 1 <1	Sulfur	ppm	ASTM D5185m		1557	1872	2140
Sodium ppm ASTM D5185m 0 3 2 Potassium ppm ASTM D5185m<>20 2 1 <1 Water % ASTM D6304 >0.05 0.006 0.005 0.004 ppm Water ppm ASTM D6304 >500 60.8 55.9 49.0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >14µm ASTM D7647 >80 611 8 18 Particles >21µm ASTM D7647 >20 190 2 3 Particles >38µm ASTM D7647 >3 1 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION <td< th=""><th>CONTAMINANTS</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 1 <1 Water % ASTM D6304 >0.05 0.006 0.005 0.004 ppm ASTM D6304 >500 60.8 55.9 49.0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >14µm ASTM D7647 >80 611 8 18 Particles >21µm ASTM D7647 >20 190 2 3 Particles >38µm ASTM D7647 >3 1 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Water % ASTM D6304 >0.05 0.006 0.005 0.004 ppm Water ppm ASTM D6304 >500 60.8 55.9 49.0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >6µm ASTM D7647 >80 611 8 18 Particles >14µm ASTM D7647 >20 190 2 3 Particles >21µm ASTM D7647 >4 11 0 0 Particles >38µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		0	3	2
ppm Water ppm ASTM D6304 >500 60.8 55.9 49.0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >6µm ASTM D7647 >80 611 8 18 Particles >14µm ASTM D7647 >20 190 2 3 Particles >21µm ASTM D7647 >4 11 0 0 Particles >38µm ASTM D7647 >3 1 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) /17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	2	1	<1
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >14µm ASTM D7647 >80 611 8 18 Particles >21µm ASTM D7647 >20 190 2 3 Particles >38µm ASTM D7647 >4 11 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	Water	%	ASTM D6304	>0.05	0.006	0.005	0.004
Particles >4µm ASTM D7647 16068 1158 456 Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >14µm ASTM D7647 >80 611 8 18 Particles >21µm ASTM D7647 >20 190 2 3 Particles >21µm ASTM D7647 >20 11 0 0 Particles >38µm ASTM D7647 >4 11 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11	ppm Water	ppm	ASTM D6304	>500	60.8	55.9	49.0
Particles >6µm ASTM D7647 >1300 5520 172 138 Particles >14µm ASTM D7647 >80 611 8 18 Particles >21µm ASTM D7647 >20 190 2 3 Particles >38µm ASTM D7647 >4 11 0 0 Particles >38µm ASTM D7647 >4 11 0 0 Particles >71µm ASTM D7647 >3 1 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/20/16 17/15/10 16/14/11 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
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FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3			
	Oil Cleanliness		ISO 4406 (c)	>/17/13	A 21/20/16	17/15/10	16/14/11
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.457 0.44 0.42	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.457	0.44	0.42

Contact/Location: Service Manager - STACHE



Built for a lifetime

OIL ANALYSIS REPORT



en

Acid Number

0.50

(B/HOX Ê0.3 Ê 0.20 Pio 0.1

1000

600 Water (

4000

200

52

5

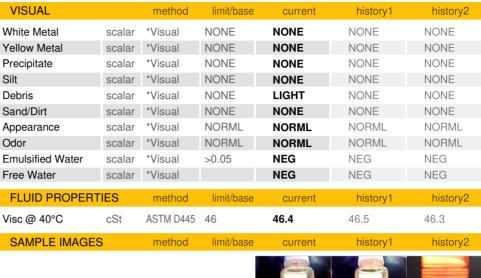
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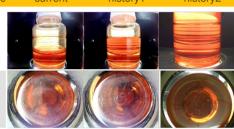
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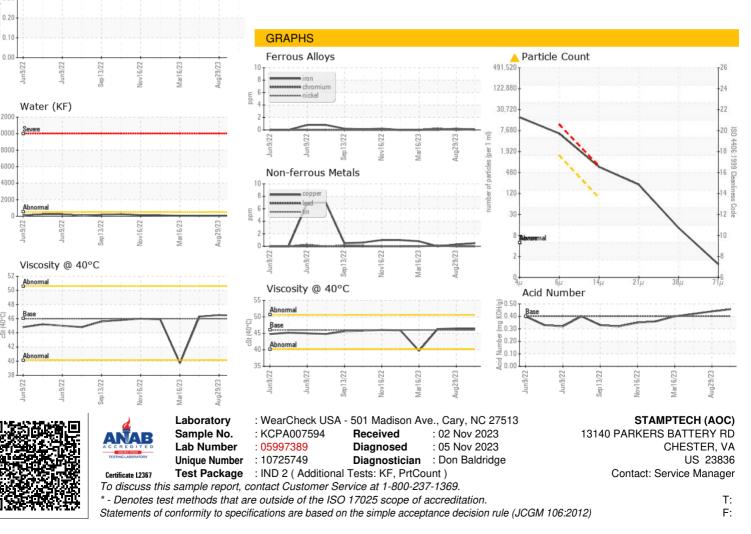
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Bottom



Contact/Location: Service Manager - STACHE