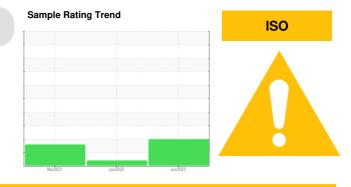


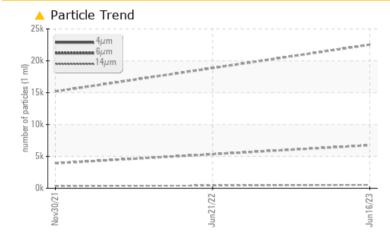
PROBLEM SUMMARY



Machine Id 6695892 (S/N 1299) Component

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	<u> </u>		▲ 3927
Particles >14µm	ASTM D7647	>80	6 528		A 333
Particles >21µm	ASTM D7647	>20	<u> </u>		A 76
Particles >38µm	ASTM D7647	>4	<u> </u>		4 5
Oil Cleanliness	ISO 4406 (c)	>/17/13	<u> </u>		1 9/16

Customer Id: HENARM Sample No.: KC120563 Lab Number: 05933660 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 <u>dougb@wearcheckusa.com</u>

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u> There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS





No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. 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. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



30 Nov 2021 Diag: Don Baldridge

No corrective action is recommended at this time. 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 ISO

Machine Id 6695892 (S/N 1299) Component

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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

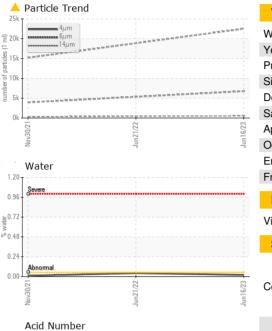
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

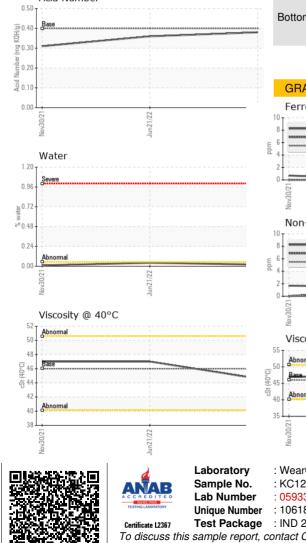
Sample Date Client Info 16 Jun 2023 21 Jun 2022 30 Nov 2021 Machine Age hrs Client Info 9363 6075 4530 Oil Age hrs Client Info 0 3800 2200 Oil Changed Client Info N/A Changed Not Changed Sample Status Imit No 0 3800 200 WEAR METALS method Imit Nose current history1 history2 Iron ppm ASTM D5185m >50 <1 <1 <1 Titanium ppm ASTM D5185m >30 0 0 0 Silver ppm ASTM D5185m >10 0 11 0 Copper ppm ASTM D5185m >10 0 0 0 Antimony ppm ASTM D5185m 0 0 0 0 Cadadum ppm ASTM D5185m 0 0 0 0 Cadadum ppm <	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 9363 6075 4530 Oil Age hrs Client Info N/A Changed Not Changed Sample Status Client Info N/A Changed Not Changed WEAR METALS method limit/base current history! history! Iron ppm ASTM D5185m >50 <1	Sample Number		Client Info		KC120563	KC103451	KC96460
Oil Age hrs Client Info NA S800 2200 Oil Changed Client Info NA Changed Not Changed Sample Status method limitbase current history1 history2 Iron ppm ASTM D5185n >50 <1	Sample Date		Client Info		16 Jun 2023	21 Jun 2022	30 Nov 2021
Oli Changed Sample Status Client Info N/A Changed ABNORMAL Not Changed ABNORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1	Machine Age	hrs	Client Info		9363	6075	4530
Sample Status method Imit/base current history1 ABNORMAL ABNORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185n >50 <1	Oil Age	hrs	Client Info		0	3800	2200
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5165n >50 <1	Oil Changed		Client Info		N/A	Changed	Not Changd
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Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 1 <1	Chromium	ppm	ASTM D5185m	>10	0	0	0
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 0 <1	Nickel	ppm	ASTM D5185m	>3	0	0	0
Aluminum ppm ASTM D5185m >10 0 <1 <1 Lead ppm ASTM D5185m >10 0 1 0 Copper ppm ASTM D5185m >50 2 2 2 Tin ppm ASTM D5185m >10 0 0 0 Antimony ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Addition ppm ASTM D5185m 0 0 0 0 Addition ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 90 8 59 5 Molybdenum ppm ASTM D5185m 90 74 80 77 Calcium ppm ASTM D5185m 2 3 2 -1 Phosphorus ppm ASTM D5185m 225 <1	Titanium	ppm	ASTM D5185m	>3	0	0	0
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Silicon ppm ASTM D5185m >25 <1 <1 <1 Sodium ppm ASTM D5185m 16 5 15 Potassium ppm ASTM D5185m >20 3 <1 3 Water % ASTM D6304 >0.05 0.020 0.041 0.011 ppm Water ppm ASTM D6304 >500 203.8 416.4 112.8 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 22529 15197 Particles >6µm ASTM D7647 >1300 6760 4 3927 Particles >1µm ASTM D7647 >20 146 5 333 Particles >21µm ASTM D7647 >20 146 5 5 Particles >38µm ASTM D7647 >3 0 5 5 Particles >71µm ASTM D7647 >3 0 5 5 Particles >71µm ASTM D7647 >3					-		-
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Particles >6µm ASTM D7647 >1300 ▲ 6760 ▲ 3927 Particles >14µm ASTM D7647 >80 ▲ 528 ▲ 333 Particles >21µm ASTM D7647 >20 ▲ 146 ▲ 76 Particles >38µm ASTM D7647 >4 ▲ 6 ▲ 5 Particles >38µm ASTM D7647 >4 ▲ 6 ▲ 5 Particles >71µm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 22/20/16 ▲ 19/16 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
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Particles >21μm ASTM D7647 >20 146 76 Particles >38μm ASTM D7647 >4 6 5 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 22/20/16 19/16 FLUID DEGRADATION method limit/base current history1 history2	· · · · · · · · · · · · · · · · · · ·						
Particles >38μm ASTM D7647 >4 6 5 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 22/20/16 ▲ 19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm						
Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 22/20/16 ▲ 19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm			>20			
Oil Cleanliness ISO 4406 (c) >/17/13 22/20/16 19/16 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm				<u> </u>		5
FLUID DEGRADATION method limit/base current history1 history2			ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>/17/13	A 22/20/16		19/16
Acid Number (AN) mg KOH/g ASTM D8045 0.4 0.38 0.36 0.31	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.38	0.36	0.31

Contact/Location: Service Manager - HENARM

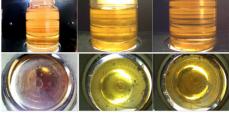


OIL ANALYSIS REPORT

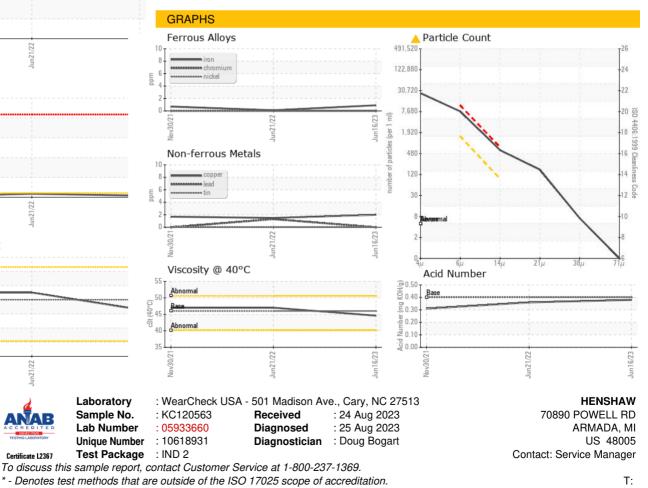




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	🔺 MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	FIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.6	47.0	47.0
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color				,		



Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)