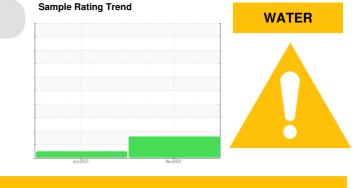


## **PROBLEM SUMMARY**

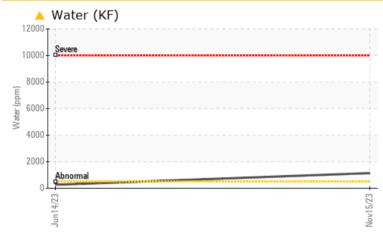


Compressor



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

### COMPONENT CONDITION SUMMARY



### RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. 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 RI	ESULTS				
Sample Status				ABNORMAL	NORMAL	
Water	%	ASTM D6304	>0.05	<b>A</b> 0.114	0.026	
ppm Water	ppm	ASTM D6304	>500	<b>1140</b>	264.9	

Customer Id: SFSREA Sample No.: KC124269 Lab Number: 06017377 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			
Action	Status	Date	Done By	Desc
Alert			?	We w partic

14 Jun 2023 Diag: Doug Bogart

for further service.

### Description

We were unable to perform a particle count due to a high concentration of particles present in this sample.

### HISTORICAL DIAGNOSIS

#### NORMAL



No corrective action is recommended at this time. 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





### **OIL ANALYSIS REPORT**

# KAESER SFC 55 8656317 (S/N 1106)

**Compressor** Fluid

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

### DIAGNOSIS

### A Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. 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

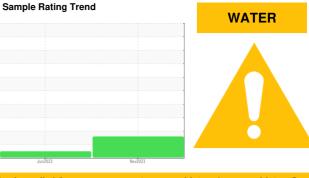
All component wear rates are normal.

### Contamination

There is a light concentration of water present in the oil.

### Fluid Condition

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

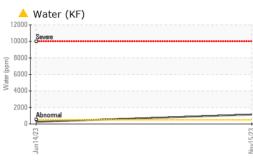


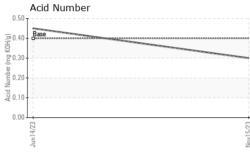
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC124269	KC104964	
Sample Date		Client Info		15 Nov 2023	14 Jun 2023	
Machine Age	hrs	Client Info		7009	3346	
Oil Age	hrs	Client Info		0	3346	
Oil Changed		Client Info		N/A	Changed	
Sample Status				ABNORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	<1	<1	
Copper	ppm	ASTM D5185m	>50	3	3	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES	1- 1-	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	00	0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m	0.0	0	0	
Magnesium	ppm	ASTM D5185m	90	43	43	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus	ppm	ASTM D5185m		0	0	
Zinc	ppm	ASTM D5185m		9	3	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	
Sodium	ppm	ASTM D5185m		22	7	
Potassium	ppm	ASTM D5185m	>20	7	6	
Water	%	ASTM D6304	>0.05	<u> </u>	0.026	
ppm Water	ppm	ASTM D6304	>500	<b>1140</b>	264.9	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			3137	
Particles >6µm		ASTM D7647	>1300		882	
Particles >14µm		ASTM D7647	>80		70	
Particles >21µm		ASTM D7647	>20		19	
Particles >38µm		ASTM D7647	>4		1	
Particles >71µm		ASTM D7647	>3		0	
Oil Cleanliness		ISO 4406 (c)	>/17/13		19/17/13	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.30	0.45	

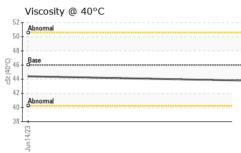


## **OIL ANALYSIS REPORT**

VISUAL







Ye Pre Silt De Sa Ap Od Err Fre Vis S S Co Bo Co Ud 4 2 0 55 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Illow Metal     so       ecipitate     so       t     so       abris     so </th <th></th> <th>al NON al NON al NON al NON al NON al NOF al &gt;0.0 al &gt;0.0 al 200 hod lim</th> <th>NE N NE N NE N NE N RML N RML N S5 O. N it/base</th> <th>ONE     NG       ONE     NG       ONE     NG       ONE     LG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     H       3.8     44</th> <th>DNE - DNE - DNE - GHT - DNE - DNE - DNE - DRML - DRML - EG - EG - istory1 - .4 -</th> <th>      history2 history2 no image</th>		al NON al NON al NON al NON al NON al NOF al >0.0 al >0.0 al 200 hod lim	NE N NE N NE N NE N RML N RML N S5 O. N it/base	ONE     NG       ONE     NG       ONE     NG       ONE     LG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     H       3.8     44	DNE - DNE - DNE - GHT - DNE - DNE - DNE - DRML - DRML - EG - EG - istory1 - .4 -	      history2 history2 no image
Pre Silit De Sa App Od Err Fre Vis S S Co Bo Co S S S S S S S S S S S S S S S S S S	Illow Metal     so       ecipitate     so       t     so       abris     so </td <td>acalar *Visu acalar *Sisu</td> <td>al NON al NON al NON al NON al NON al NOF al &gt;0.0 al &gt;0.0 al 200 hod lim</td> <td>NE N NE N NE N NE N RML N RML N S5 O. N it/base</td> <td>ONE     NG       ONE     NG       ONE     NG       ONE     LG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     H       3.8     44</td> <td>DNE - DNE - DNE - GHT - DNE - DNE - DRML - DRML - CRML - C</td> <td>    history2 history2</td>	acalar *Visu acalar *Sisu	al NON al NON al NON al NON al NON al NOF al >0.0 al >0.0 al 200 hod lim	NE N NE N NE N NE N RML N RML N S5 O. N it/base	ONE     NG       ONE     NG       ONE     NG       ONE     LG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     H       3.8     44	DNE - DNE - DNE - GHT - DNE - DNE - DRML - DRML - CRML - C	    history2 history2
Pre Sill De Sa App Od Err Fre Vis S S Co Bo Co U U U U U U U U U U U U U U U U U U	ecipitate so t so obris so and/Dirt so opearance so dor so nulsified Water so ee Water so culto PROPERTIES so @ 40°C cs SAMPLE IMAGES of SAMPLE IMAGES	acalar *Visu acalar *Visu	al NON al NON al NON al NON al NOF al >0.0 al >0.0 al >0.0 al im bod lim	NE N NE N NE N RML N RML N S O. N it/base	ONE     NG       ONE     NG       ONE     LG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     H       3.8     44	DNE - DNE - GHT - DNE - DRML - DRML - EG - eG - tistory1 - .4 -	   history2 history2
ECSIDAD	t so bris so ind/Dirt so pearance so hor so nulsified Water so ee Water so ELUID PROPERTIES so @ 40°C cs SAMPLE IMAGES blor ttom BRAPHS ferrous Alloys	acalar *Visu acalar *Sisu acalar *Sisu	al NON al NON al NOF al NOF al >0.0 al >0.0 al im 10445 46 hod lim	NE N NE N NE N RML N S O. N it/base	ONE     NG       ONE     LIG       ONE     NG       ORML     NG       ORML     NG       2%     NE       EG     NE       current     h       3.8     44	DNE - GHT - DNE - DRML - DRML - EG - EG - Nistory1 . .4 -	history2 history2
Level of the second sec	abris science water science	acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Sisu acalar *Sisu acalar *Sisu	al NON al NOF al NOF al >0.0 al >0.0 al 1 hod lim 1 D445 46 hod lim	NE N NE N RML N S S O. N it/base 43	ONE     Lito       ONE     No       ORML     No       ORML     No       2%     NE       EG     NE       current     H       3.8     44	GHT - DNE - DRML - DRML - EG - EG - istory1 .4 -	history2
Sa Ap Od Err Fre Cosynon Co Bo Co Bo Co Sa Co Sa Fre Cosynon Co Sa Co Co Sa Co Co Sa Co Co Sa Co Co Sa Co Sa Co Sa Co Sa Co Sa Co Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Co Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Sa Co Sa C S Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co Sa Co S C C S C C Co S C C C C S C C C C C	Ind/Dirt so appearance so alor so nulsified Water so appe Water so ELUID PROPERTIES Soc @ 40°C cs SAMPLE IMAGES AMPLE IMAGES appearance so appearance so appeara	acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Sisu St ASTM	al NON al NOF al >0.0 al >0.0 al im hod lim hod lim	NE N RML N 25 O. it/base 43	ONE   NG     ORML   NG     ORML   NG     2%   NE     EG   NE     current   H     3.8   44	DNE - DRML - DRML - EG - EG - Nistory1 .4 - Nistory1	history2 history2 history2
Co Co Co Co Co Co Co Co Co Co	pearance       sc         dor       sc         hulsified Water       sc         ee Water       sc         FLUID PROPERTIES       sc         Sc @ 40°C       cs         SAMPLE IMAGES       sc         olor       sc         SAMPLE IMAGES       sc         sc @ 40°C       cs         SAMPLE IMAGES       sc         sc @ function       sc         s	acalar *Visu acalar *Visu acalar *Visu acalar *Visu acalar *Visu scalar *Visu scalar *Visu scalar *Sisu scalar *Visu	al NOF al >0.0 al >0.0 hod lim l D445 46 hod lim	RML N RML N 05 0. N it/base	ORML NG ORML NG 2% NE EG NE current h 3.8 44	DRML - DRML - EG - EG - Nistory1 .4 - Nistory1	history2 history2 history2
Err Fre Uss Co Bo Co Bo Co Bo Co Bo Co Bo Co Co Co Bo Co Co Co Co Co Co Co Co Co Co Co Co Co	dor     sc       hulsified Water     sc       ee Water     sc       FLUID PROPERTIES       Sc @ 40°C     cs       SAMPLE IMAGES       olor       ttom       GRAPHS       Ferrous Alloys	acalar *Visu acalar *Visu acalar *Visu S met St ASTM	al NOF al >0.0 hod lim l D445 46 hod lim	RML N 05 O. it/base 43	ORML NG 2% NE EG NE current h 3.8 44	DRML - EG - history1 .4 - history1	history2 history2 history2 no image
Err Fre Uss (Co Bo Co Bo Co Bo Co Co Co Co Co Co Co Co Co Co Co Co Co	Anulsified Water so ee Water so LUID PROPERTIES Soc @ 40°C cf SAMPLE IMAGES olor ttom ttom SRAPHS Ferrous Alloys	scalar *Visu scalar *Visu S met sSt ASTM	al >0.0 hod lim I D445 46 hod lim	15 0. N it/base 43	2%NEEGNEcurrenth3.844	EG - tistory1 .4 - tistory1	history2 history2 history2 no image
Free Vis S Co Bo G G F U U d d d d d d d d d d d d d d d d d	ee Water so EUID PROPERTIES so @ 40°C cs SAMPLE IMAGES olor ttom SRAPHS Ferrous Alloys	scalar *Visu S met St ASTM	al lim hod lim hod lim	it/base 43	EG NE current h 3.8 44	EG - nistory1 .4 - nistory1	history2 history2 no image
Co Co Co Co Co Co Co Co Co Co	ELUID PROPERTIES         Soc @ 40°C       cs         SAMPLE IMAGES         olor         ttom         SRAPHS         Ferrous Alloys	S met	hod lim I D445 46 hod lim	it/base 43	current         ł           3.8         44	nistory1 .4 - nistory1	history2 history2 no image
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	ttom SRAPHS Ferrous Alloys	met		it/base	current H		no image
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Und 4 2 0 ECFLUIR N 10 10 10 10 10 10 10 10 10 10 10 10 10	iron chromium nickel		23				
und 8 4 4 2 0 E27 10 10 10 10 4 4 2 10 10 10 10 10 10 10 10 10 10	nickel		23				
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55 1	copper lead		33				
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35	Base Abnormal		23	0.30 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			3
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Sample No. : KC Lab Number : 06 Unique Number : 10 ficate 12367 Test Package : IN	earCheck USA - 501	Madison Av	e Carv N(				
discuss this sample report, contai Denotes test methods that are ou	C124269         Rec           017377         Dia           0756521         Dia	agnosed	: 24 Nov 2 : 29 Nov 2 : Jonathan	.023 .023		41 D REA	INTEC INC ENNIS DF ADING, PA US 1961( Contact:

method limit/base

history1

current

history2

\* - Denotes test methods that Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: