

# **PROBLEM SUMMARY**

Sample Rating Trend



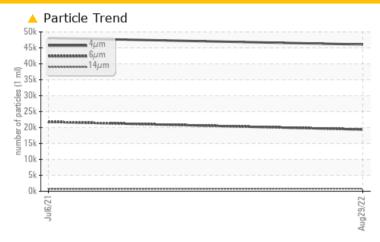
KAESER 7504789

Component

Compressor

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

## **COMPONENT CONDITION SUMMARY**



### RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS					
Sample Status			<b>ABNORMAL</b>	ABNORMAL	
Particles >6µm	ASTM D7647	>1300	<b>19380</b>	<u>^</u> 21783	
Particles >14μm	ASTM D7647	>80	<b>A</b> 816	<u>^</u> 721	
Particles >21µm	ASTM D7647	>20	<b>^</b> 263	<u>114</u>	
Particles >38μm	ASTM D7647	>4	<u> </u>	<u> </u>	
Oil Cleanliness	ISO 4406 (c)	>/17/13	<b>23/21/17</b>	<u>^</u> 22/17	

**Customer Id: BERCLE** Sample No.: KC05637688 Lab Number: 05637688 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

## 06 Jul 2021 Diag: Doug Bogart

ISO



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. 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



# **KAESER 7504789**

Component

Compressor

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

## **DIAGNOSIS**

#### Recommendation

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.

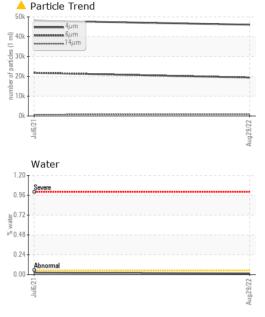
#### **Fluid Condition**

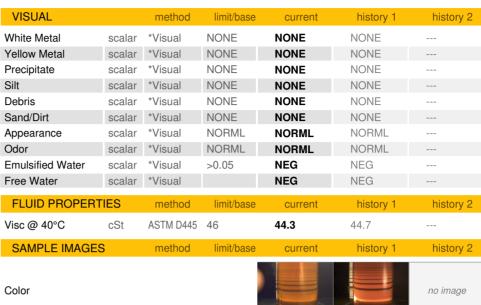
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

			Jul2021	Aug2022		
CAMPLE INCOR	AATIONI	and the second			Internación de la constantia de la const	la la taura O
SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number				KC05637688	KC05301265	
Sample Date				29 Aug 2022	06 Jul 2021	
Machine Age	hrs			0	2712	
Oil Age	hrs			0	2712	
Oil Changed				N/A	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	<1	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>10	0	<1	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	4	4	
Tin	ppm	ASTM D5185m	>10	<1	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		0	13	
Barium	ppm	ASTM D5185m	90	6	4	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	90	66	54	
Calcium	ppm	ASTM D5185m	2	<1	<1	
Phosphorus	ppm	ASTM D5185m		0	1	
Zinc	ppm	ASTM D5185m		5	3	
CONTAMINANTS	;	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	0	<1	
Sodium	ppm	ASTM D5185m		12	11	
Potassium	ppm	ASTM D5185m	>20	2	10	
Water	%	ASTM D6304	>0.05	0.014	0.023	
ppm Water	ppm	ASTM D6304	>500	145.1	232.6	
FLUID CLEANLIN	IESS	method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		46067	48084	
Particles >6µm		ASTM D7647	>1300	<b>19380</b>	<u>^</u> 21783	
Particles >14µm		ASTM D7647	>80	<u>▲</u> 816	<u> </u>	
Particles >21µm		ASTM D7647	>20	<u>^</u> 263	<u> 114</u>	
Particles >38µm		ASTM D7647	>4	<u>▲</u> 14	<u>^</u> 9	
Particles >71µm		ASTM D7647	>3	1	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	23/21/17	<u>^</u> 22/17	
FLUID DEGRADA	TION	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.37	0.323	
					0.020	



## **OIL ANALYSIS REPORT**





GRAPHS					
Ferrous Alloys	Particle Count				
iron	101,020				
• •••••• nickel	122,880				
	30,720				
	7,680				
Jul6/2/Ju					
lar,	s (per 1 ml)				
Non-ferrous Metals	Aug 29/22 Aug 29/22 1.920 - 12/0 480 - 12/0	_			
copper	b 120+				
sessesses tin	and the second s				
	30+				
	8 <b>Birme</b> mal				
Jul6/21	Aug29/22	,			
Viscosity @ 400C	$4\mu$ $6\mu$ $14\mu$	21μ 38μ 71			
Viscosity @ 40°C	Acid Number				
Abnormal	8ase 0.40 Base	***************************************			
Base	£0.30				
Abnormal	0.50 H) 0.40 E 0.30 E 0.30 V 0.10 V 0.00				
- 0	N 0.10				
12	7 V V V V V V V V V V V V V V V V V V V				
Jul6/2'	Aug29/22 Jul6/21				



Certificate L2367

Laboratory Sample No. Lab Number Test Package : IND 2

Unique Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Bottom** 

: KC05637688 : 05637688 : 10127218

Received Diagnosed

Diagnostician

: 09 Sep 2022 : 14 Sep 2022 : Jonathan Hester

**BERRY PLUMBING** 6736 CLEVELAND HWY CLERMONT, GA USA 30527

Contact: Service Manager

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)

Contact/Location: Service Manager - BERCLE

T:

F:

no image