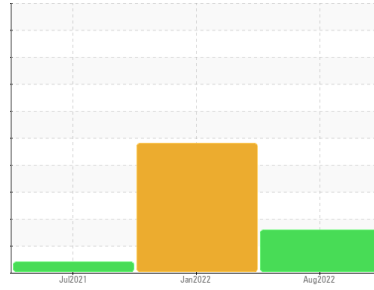


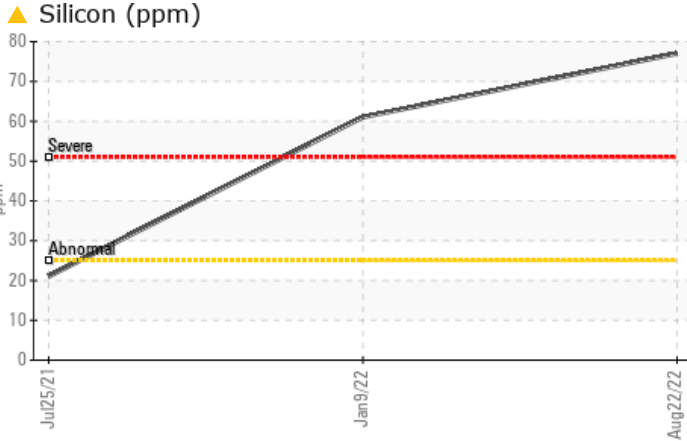
# PROBLEM SUMMARY

Sample Rating Trend



Machine Id  
**7355500 (S/N 1129)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## 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				<b>ABNORMAL</b>	SEVERE	ABNORMAL
Silicon	ppm	ASTM D5185m	>25	<b>▲ 77</b>	61	21

Customer Id: BOCTAN  
Sample No.: KCP48161  
Lab Number: 05629588  
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  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 09 Jan 2022 Diag: Don Baldrige

#### DIRT



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Elemental level of silicon (Si) above normal. 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.

view report



### 25 Jul 2021 Diag: Don Baldrige

#### VIS DEBRIS



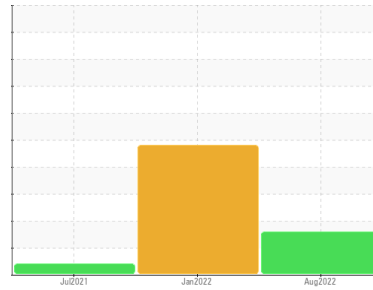
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. 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.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**7355500 (S/N 1129)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## 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

Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

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

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number		<b>KCP48161</b>	KCP31985	KCP41725
Sample Date		<b>22 Aug 2022</b>	09 Jan 2022	25 Jul 2021
Machine Age	hrs	<b>12009</b>	6839	2975
Oil Age	hrs	<b>5170</b>	2221	2074
Oil Changed		<b>Not Changed</b>	Changed	Not Changed
Sample Status		<b>ABNORMAL</b>	SEVERE	ABNORMAL

## WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185m >10	<b>0</b>	0	1
Lead	ppm ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm ASTM D5185m >50	<b>18</b>	17	10
Tin	ppm ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm ASTM D5185m	<b>---</b>	---	1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m	<b>0</b>	0	10
Barium	ppm ASTM D5185m 90	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm ASTM D5185m 90	<b>0</b>	0	5
Calcium	ppm ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm ASTM D5185m	<b>1</b>	3	3
Zinc	ppm ASTM D5185m	<b>0</b>	<1	10
Sulfur	ppm ASTM D5185m	<b>13131</b>	13656	14608

## CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	<b>▲ 77</b>	61	21
Sodium	ppm ASTM D5185m	<b>0</b>	3	5
Potassium	ppm ASTM D5185m >20	<b>0</b>	<1	4
Water	% ASTM D6304 >0.05	<b>0.008</b>	0.004	0.011
ppm Water	ppm ASTM D6304 >500	<b>88.5</b>	49.1	113.9

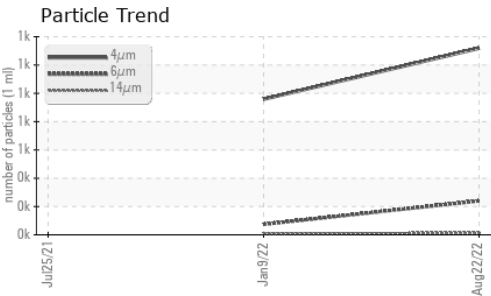
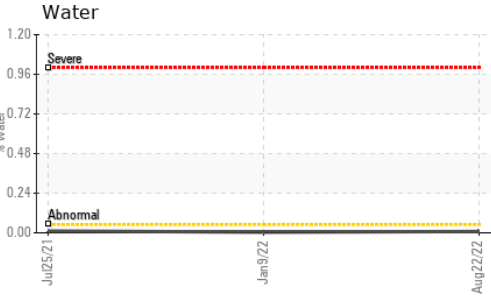
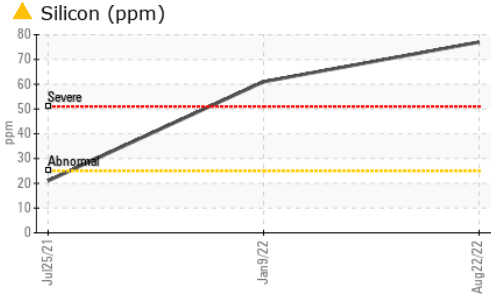
## FLUID CLEANLINESS

method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	<b>1318</b>	958	---
Particles >6µm	ASTM D7647 >1300	<b>240</b>	74	---
Particles >14µm	ASTM D7647 >80	<b>14</b>	9	---
Particles >21µm	ASTM D7647 >20	<b>2</b>	2	---
Particles >38µm	ASTM D7647 >4	<b>0</b>	0	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>18/15/11</b>	13/10	---

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045 0.4	<b>0.38</b>	0.39	0.363

# OIL ANALYSIS REPORT



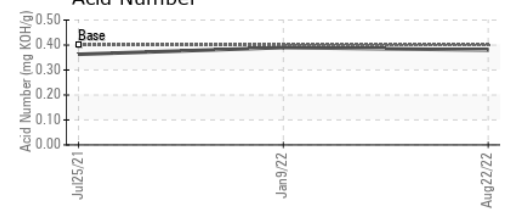
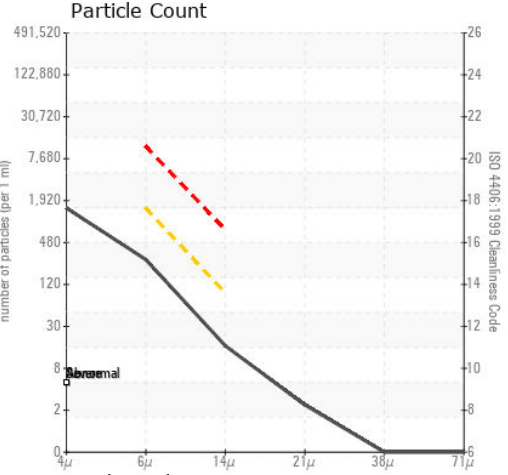
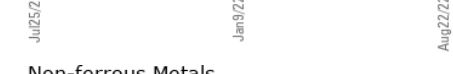
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	45.2	44.4	44.3

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP48161 **Received** : 29 Aug 2022  
**Lab Number** : 05629588 **Diagnosed** : 30 Aug 2022  
**Unique Number** : 10114109 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BOCAR US INC**  
 23727 BIBB GARRET RD  
 TANNER, AL  
 USA 35671  
 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)

T:  
F: