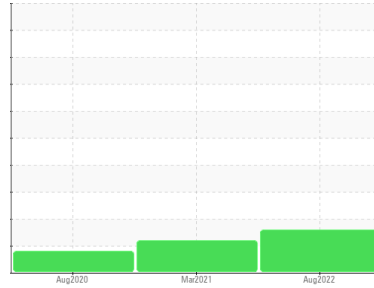


# PROBLEM SUMMARY

Sample Rating Trend



ISO

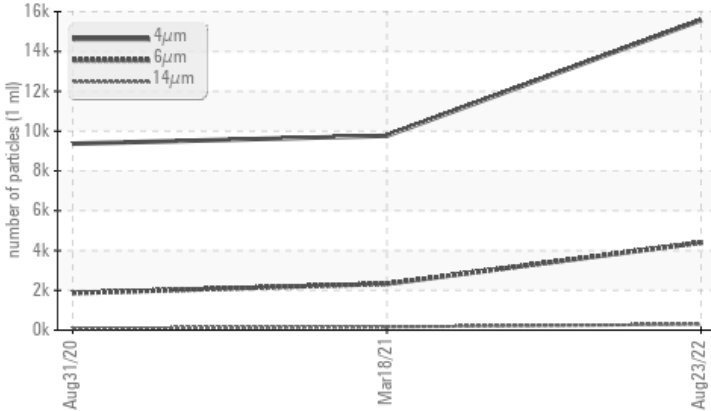


Machine Id  
**6777982 (S/N 1029)**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ATTENTION
Particles >6µm	ASTM D7647	>1300	▲ <b>4397</b>	▲ 2328	▲ 1862
Particles >14µm	ASTM D7647	>80	▲ <b>298</b>	▲ 161	▲ 93
Particles >21µm	ASTM D7647	>20	▲ <b>42</b>	▲ 38	▲ 27
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/15</b>	▲ 18/15	▲ 18/14

Customer Id: ATLHOM  
Sample No.: KC107346  
Lab Number: 05631685  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

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

## HISTORICAL DIAGNOSIS

### 18 Mar 2021 Diag: Angela Borella

ISO



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 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.

view report



### 31 Aug 2020 Diag: Angela Borella

ISO



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 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.

view report

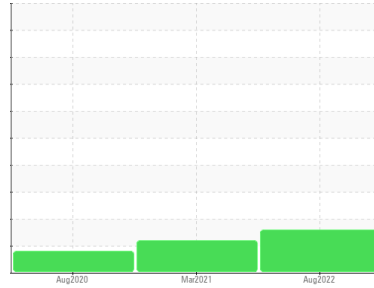




Machine Id  
**6777982 (S/N 1029)**

Component  
**Compressor**

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



## 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 INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			<b>KC107346</b>	KC89397	KC89398
Sample Date			<b>23 Aug 2022</b>	18 Mar 2021	31 Aug 2020
Machine Age	hrs		<b>2374</b>	3045	2551
Oil Age	hrs		<b>0</b>	0	0
Oil Changed			<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	4
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >10	<b>1</b>	<1	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>6</b>	3	11
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	0
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>	12	<1
Barium	ppm	ASTM D5185m 90	<b>&lt;1</b>	10	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>&lt;1</b>	63	49
Calcium	ppm	ASTM D5185m 2	<b>0</b>	1	2
Phosphorus	ppm	ASTM D5185m	<b>4</b>	5	7
Zinc	ppm	ASTM D5185m	<b>&lt;1</b>	22	85

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	7	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	26	18
Potassium	ppm	ASTM D5185m >20	<b>0</b>	3	5
Water	%	ASTM D6304 >0.05	<b>0.004</b>	0.047	0.028
ppm Water	ppm	ASTM D6304 >500	<b>49.5</b>	477.4	280.8

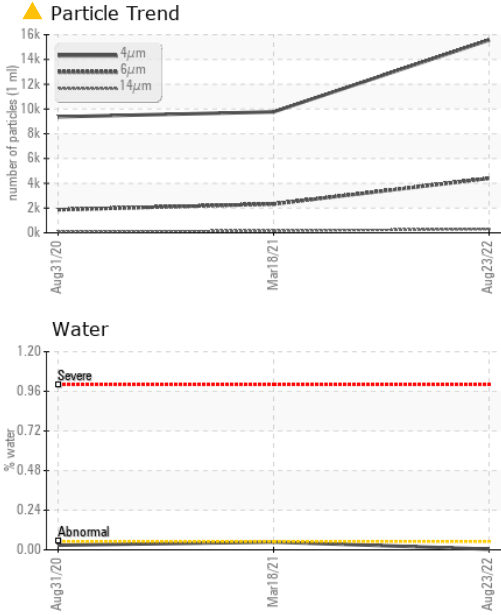
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>15570</b>	9766	9369
Particles >6µm	ASTM D7647 >1300		▲ <b>4397</b>	▲ 2328	▲ 1862
Particles >14µm	ASTM D7647 >80		▲ <b>298</b>	▲ 161	▲ 93
Particles >21µm	ASTM D7647 >20		▲ <b>42</b>	▲ 38	27
Particles >38µm	ASTM D7647 >4		<b>2</b>	0	4
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		▲ <b>21/19/15</b>	▲ 18/15	▲ 18/14

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.19</b>	0.295	0.225

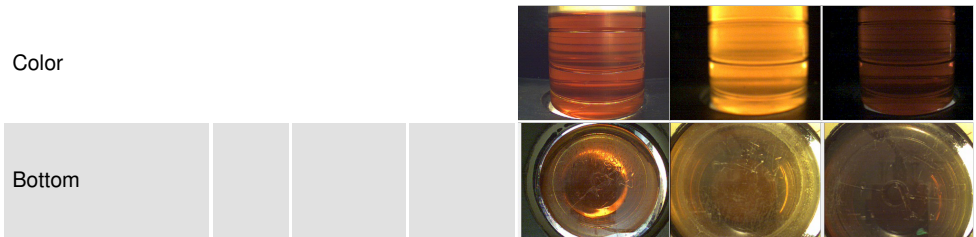
# OIL ANALYSIS REPORT



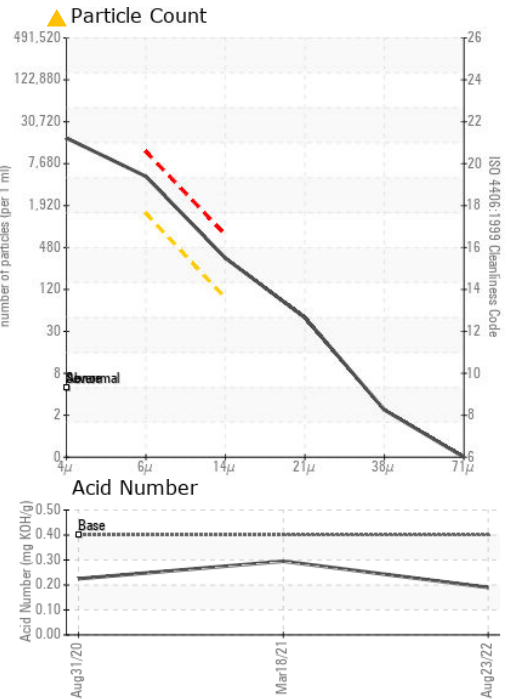
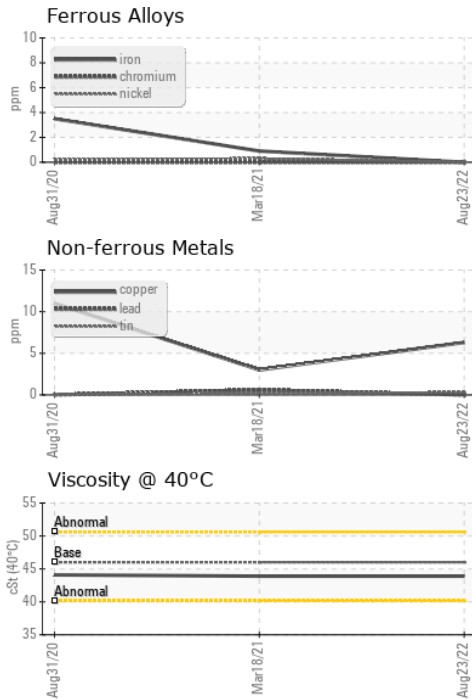
VISUAL	method	limit/base	current	history 1	history 2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	<b>43.9</b>	43.9	44.1

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC107346 **Received** : 01 Sep 2022  
**Lab Number** : 05631685 **Diagnosed** : 02 Sep 2022  
**Unique Number** : 10116206 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**ATLANTIC SAPPHIRE**  
 22275 SW 272ND ST  
 HOMESTEAD, FL  
 USA 33064  
 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: