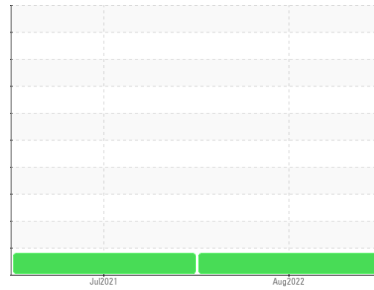


# PROBLEM SUMMARY

Sample Rating Trend



ISO



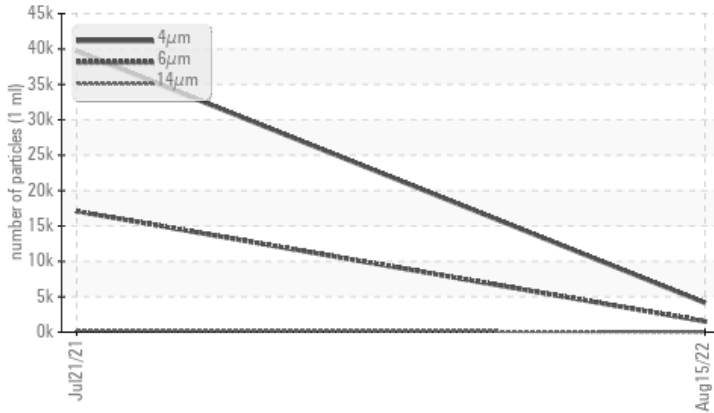
Machine Id  
**7471966 (S/N 1438)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	---
Particles >6µm	ASTM D7647 >1300	▲ 1518	▲ 17074	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/18/12	▲ 21/15	---

Customer Id: PHINEWKC  
Sample No.: KC86310  
Lab Number: 05637143  
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

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

**21 Jul 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 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.

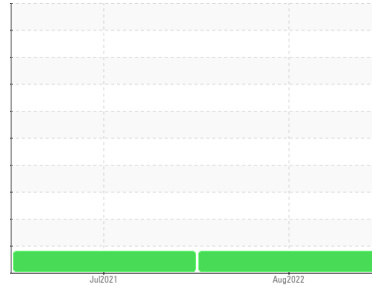
view report





Machine Id  
**7471966 (S/N 1438)**

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



## DIAGNOSIS

### ▲ Recommendation

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.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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>KC86310</b>	KC98176	---
Sample Date			<b>15 Aug 2022</b>	21 Jul 2021	---
Machine Age	hrs		<b>5949</b>	1773	---
Oil Age	hrs		<b>4000</b>	1773	---
Oil Changed			<b>Changed</b>	Changed	---
Sample Status			<b>ATTENTION</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>9</b>	3	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	27	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 90	<b>20</b>	60	---
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	<b>1</b>	7	---
Zinc	ppm	ASTM D5185m	<b>3</b>	0	---

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	---
Sodium	ppm	ASTM D5185m	<b>6</b>	15	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	7	---
Water	%	ASTM D6304 >0.05	<b>0.012</b>	0.029	---
ppm Water	ppm	ASTM D6304 >500	<b>124.3</b>	299.8	---

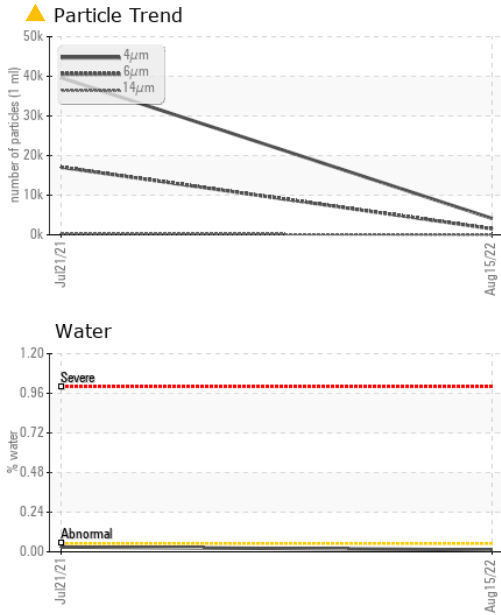
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>4126</b>	39682	---
Particles >6µm	ASTM D7647 >1300		<b>▲ 1518</b>	▲ 17074	---
Particles >14µm	ASTM D7647 >80		<b>23</b>	▲ 281	---
Particles >21µm	ASTM D7647 >20		<b>5</b>	12	---
Particles >38µm	ASTM D7647 >4		<b>1</b>	0	---
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>▲ 19/18/12</b>	▲ 21/15	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.40</b>	0.368	---

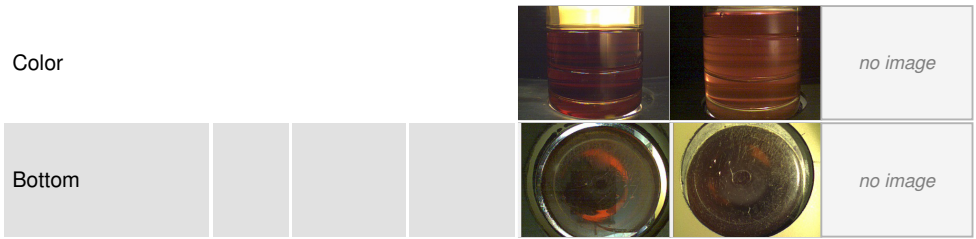
# OIL ANALYSIS REPORT



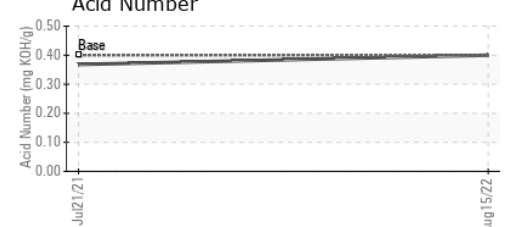
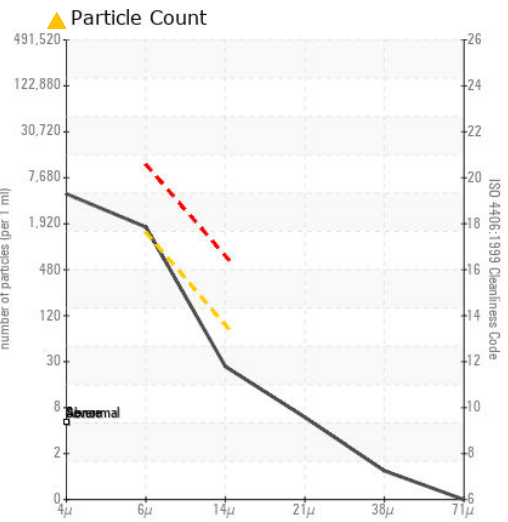
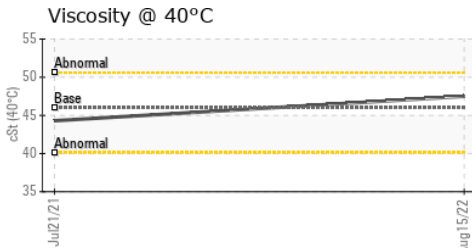
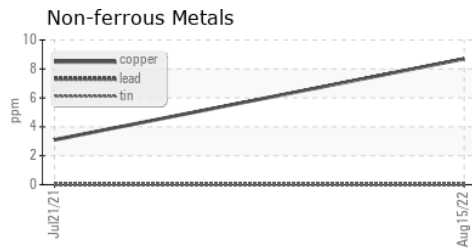
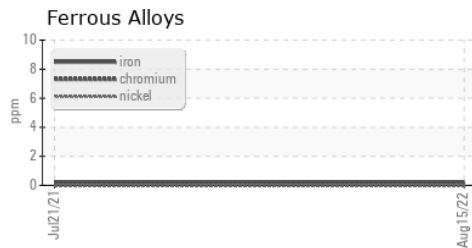
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	47.5	44.3

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.** : KC86310 **Received** : 08 Sep 2022  
**Lab Number** : 05637143 **Diagnosed** : 09 Sep 2022  
**Unique Number** : 10126673 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**PHILADELPHIA GEAR - TIMKEN**  
 100 ANCHOR MILL RD  
 NEW CASTLE, DE  
 USA 19720  
 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)