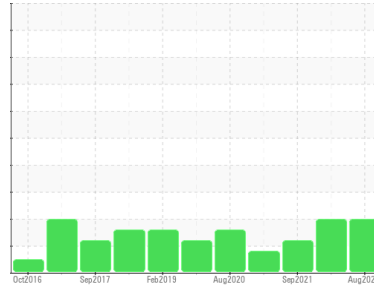




# PROBLEM SUMMARY

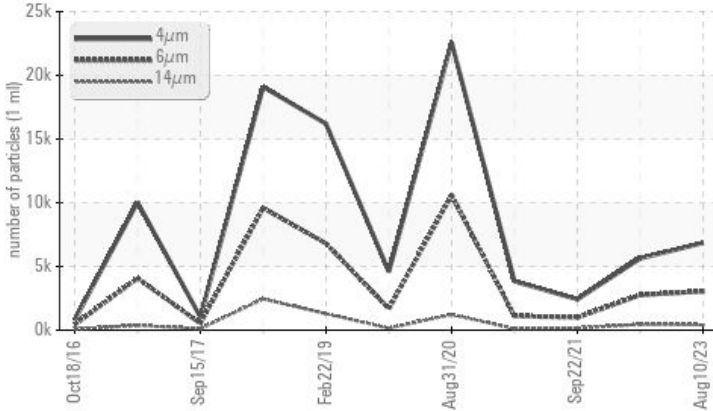
Sample Rating Trend



Machine Id  
**KAESER CSD1005 5260248 (S/N 1055)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) FG-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			<b>ABNORMAL</b>	ABNORMAL	ATTENTION
Particles >6µm	ASTM D7647	>1300	▲ <b>3048</b>	▲ 2766	996
Particles >14µm	ASTM D7647	>80	▲ <b>414</b>	▲ 453	▲ 154
Particles >21µm	ASTM D7647	>20	▲ <b>155</b>	▲ 157	▲ 56
Particles >38µm	ASTM D7647	>4	▲ <b>13</b>	▲ 9	▲ 5
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/19/16</b>	▲ 20/19/16	▲ 17/14

Customer Id: VITWESNJ  
 Sample No.: KC122898  
 Lab Number: 05929602  
 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

### 12 Jan 2023 Diag: Don Baldrige

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.

view report



### 22 Sep 2021 Diag: Doug Bogart

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



### 07 Apr 2021 Diag: Don Baldrige

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.

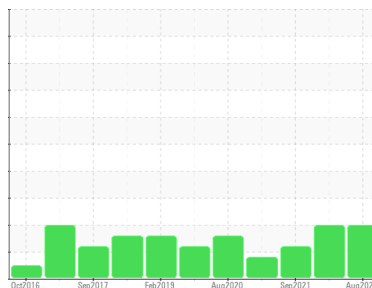
view report



Machine Id  
**KAESER CSD1005 5260248 (S/N 1055)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-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 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	history1	history2
Sample Number	Client Info			<b>KC122898</b>	KC106856	KC83464
Sample Date	Client Info			<b>10 Aug 2023</b>	12 Jan 2023	22 Sep 2021
Machine Age	hrs	Client Info		<b>24756</b>	22595	18157
Oil Age	hrs	Client Info		<b>8338</b>	2310	1770
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>1</b>	3	2
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>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>10</b>	2	12
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>5</b>	8	15
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

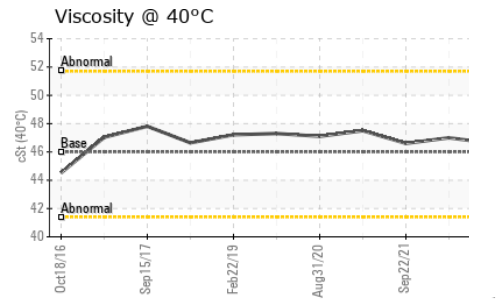
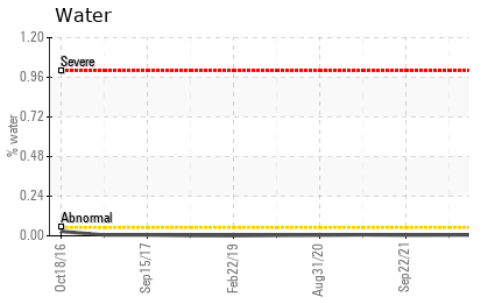
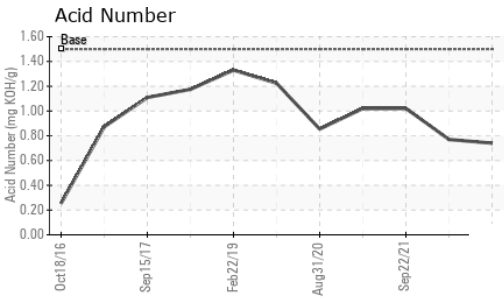
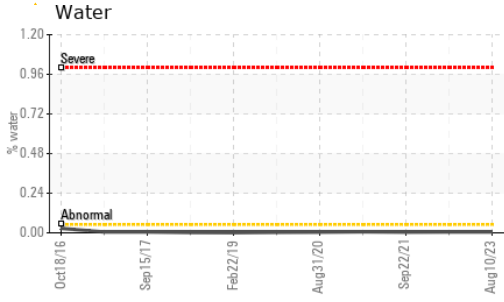
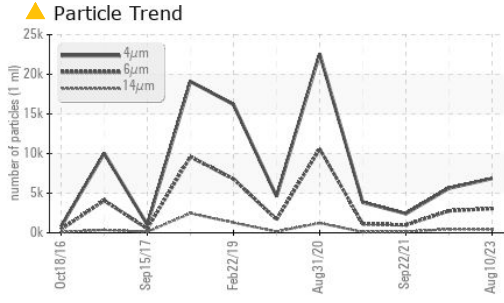
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	<1
Barium	ppm	ASTM D5185m		<b>0</b>	1	3
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>1</b>	<1	5
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	500	<b>292</b>	344	434
Zinc	ppm	ASTM D5185m		<b>143</b>	268	249

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>0.005</b>	0.005	0.004
ppm Water	ppm	ASTM D6304	>500	<b>51.3</b>	55.4	46.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>6852</b>	5628	2418
Particles >6µm		ASTM D7647	>1300	<b>▲ 3048</b>	▲ 2766	996
Particles >14µm		ASTM D7647	>80	<b>▲ 414</b>	▲ 453	▲ 154
Particles >21µm		ASTM D7647	>20	<b>▲ 155</b>	▲ 157	▲ 56
Particles >38µm		ASTM D7647	>4	<b>▲ 13</b>	▲ 9	▲ 5
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 20/19/16</b>	▲ 20/19/16	▲ 17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	<b>0.74</b>	0.77	1.021

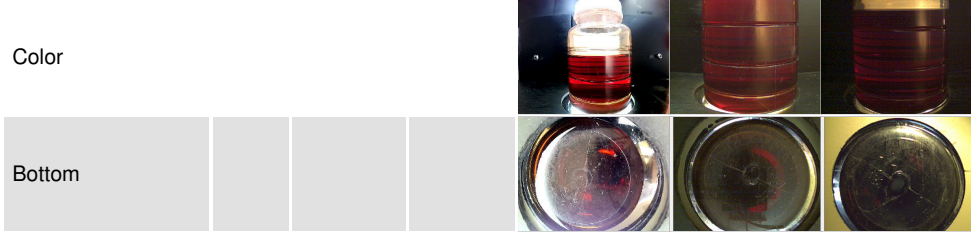
# OIL ANALYSIS REPORT



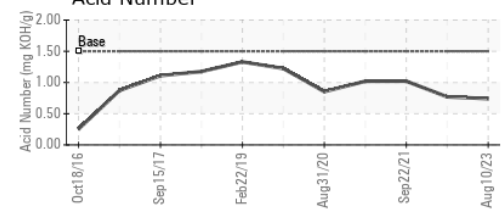
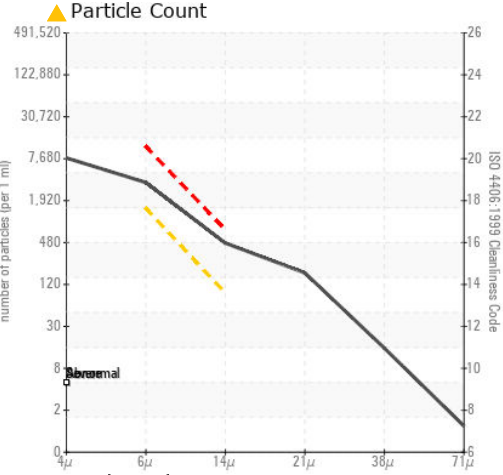
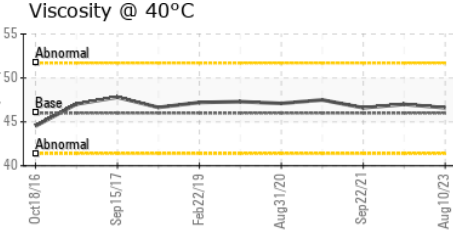
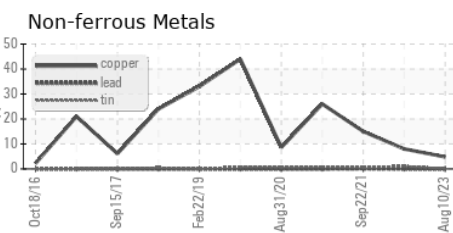
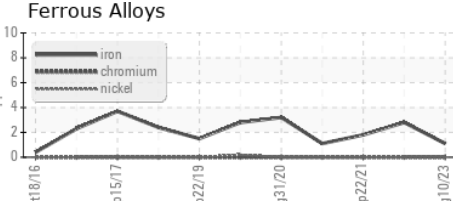
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.6	47.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC122898 **Received** : 21 Aug 2023  
**Lab Number** : 05929602 **Diagnosed** : 22 Aug 2023  
**Unique Number** : 10609549 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**VITAQUEST INTERNATIONAL INC.**  
 8 HENDERSON DR.  
 WEST CALLDWEL, NJ  
 US 07006  
 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: