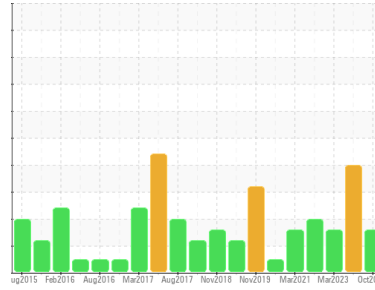




# PROBLEM SUMMARY

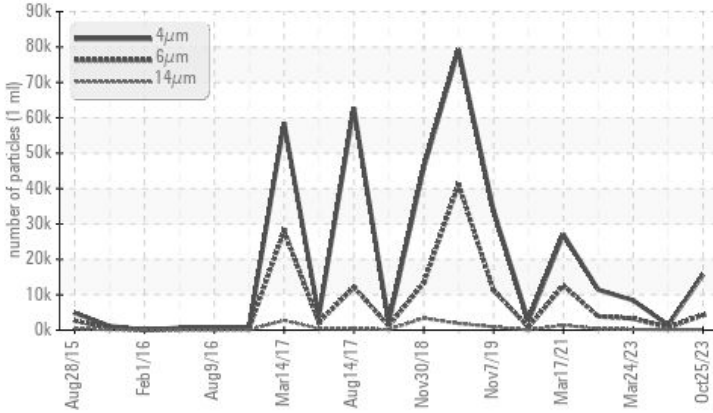
Sample Rating Trend



Machine Id  
**KAESER CSD 100ST 5247120 (S/N 1019)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## 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			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 4236	772	▲ 3281
Particles >14µm	ASTM D7647	>80	▲ 157	▲ 131	▲ 201
Particles >21µm	ASTM D7647	>20	▲ 32	▲ 44	▲ 38
Oil Cleanliness	ISO 4406 (c)	>17/13	▲ 19/14	▲ 17/14	▲ 19/15

Customer Id: METCOM  
 Sample No.: KC05994392  
 Lab Number: 05994392  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 12 Jul 2023 Diag: Jonathan Hester

WATER



The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. Appearance is hazy. There is a moderate amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 24 Mar 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



### 03 Jun 2022 Diag: Don Baldrige

ISO



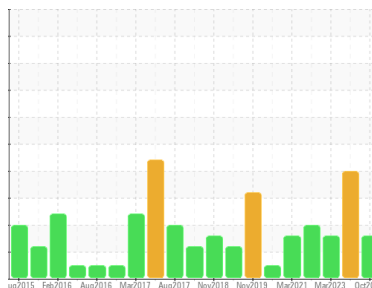
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id  
**KAESER CSD 100ST 5247120 (S/N 1019)**

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

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>KC05994392</b>	KC05909471	KC05813925
Sample Date	Client Info			<b>25 Oct 2023</b>	12 Jul 2023	24 Mar 2023
Machine Age	hrs	Client Info		<b>33625</b>	33574	33466
Oil Age	hrs	Client Info		<b>0</b>	0	3600
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</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>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	3
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

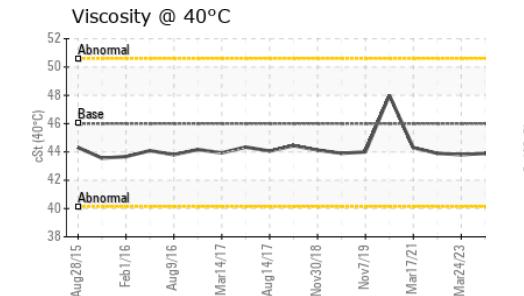
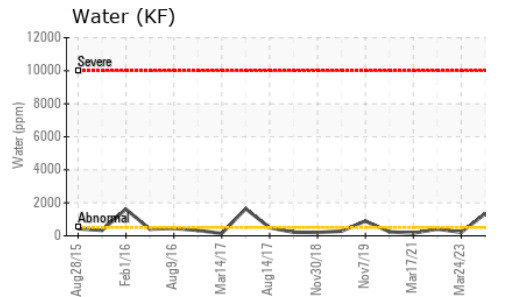
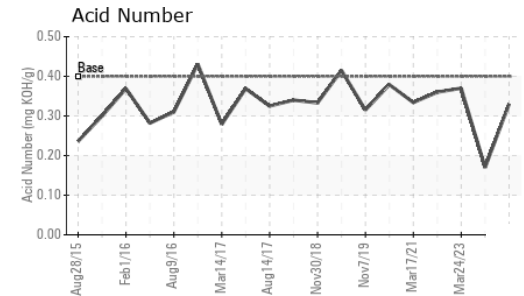
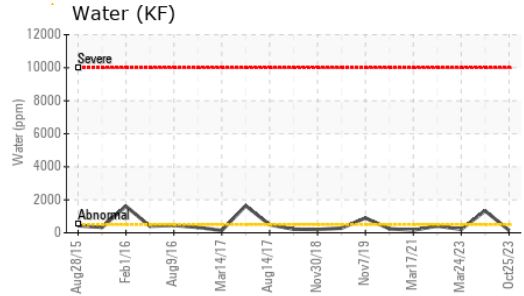
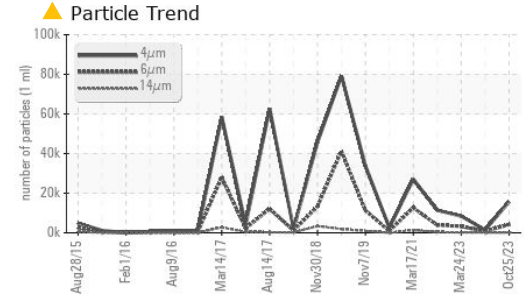
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>44</b>	11	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	90	<b>66</b>	7	57
Calcium	ppm	ASTM D5185m	2	<b>&lt;1</b>	0	1
Phosphorus	ppm	ASTM D5185m		<b>36</b>	64	8
Zinc	ppm	ASTM D5185m		<b>31</b>	27	17

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>15</b>	<1	17
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	3
Water	%	ASTM D6304	>0.05	<b>0.014</b>	▲ 0.133	0.021
ppm Water	ppm	ASTM D6304	>500	<b>148.9</b>	▲ 1330	212.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>15713</b>	1418	8423
Particles >6µm		ASTM D7647	>1300	▲ <b>4236</b>	772	▲ 3281
Particles >14µm		ASTM D7647	>80	▲ <b>157</b>	▲ 131	▲ 201
Particles >21µm		ASTM D7647	>20	▲ <b>32</b>	▲ 44	▲ 38
Particles >38µm		ASTM D7647	>4	<b>0</b>	▲ 7	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ <b>19/14</b>	▲ 17/14	▲ 19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.33</b>	0.17	0.37

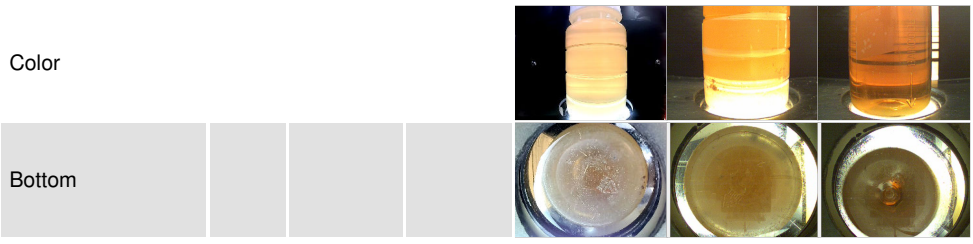
# OIL ANALYSIS REPORT



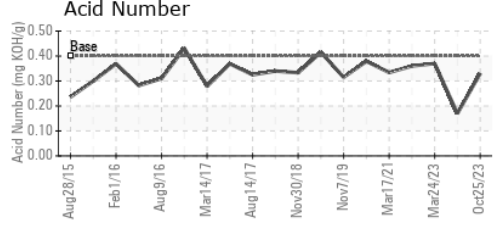
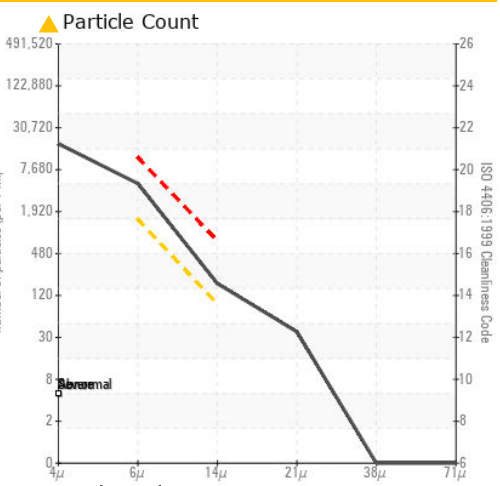
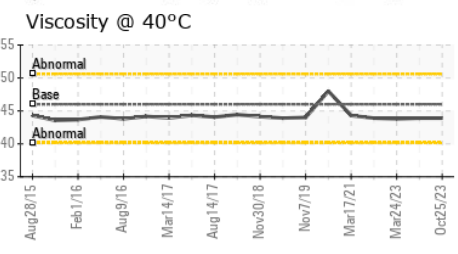
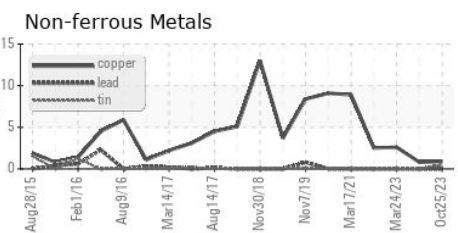
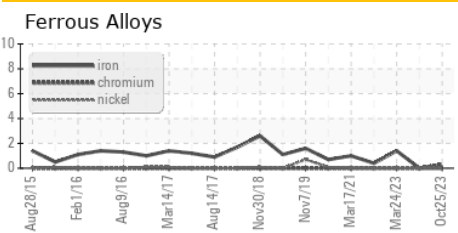
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	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	43.9	43.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC05994392  
**Lab Number** : 05994392  
**Unique Number** : 10722752  
**Test Package** : IND 2

**Received** : 31 Oct 2023  
**Diagnosed** : 02 Nov 2023  
**Diagnostician** : Don Baldrige

**METRO SITE FABRICATORS**  
 180 INDUSTRIAL PARK BLVD  
 COMMERCE, GA  
 US 30529  
 Contact:

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: