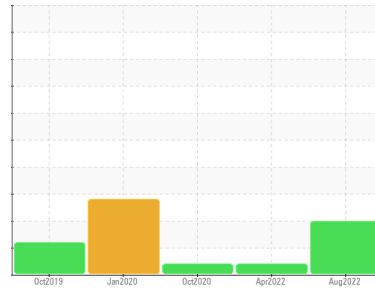


# PROBLEM SUMMARY

## Sample Rating Trend



ISO



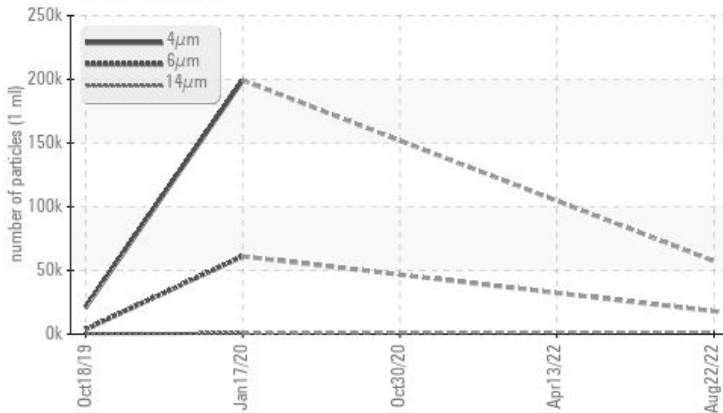
Machine Id  
**KAESER CSD 100S 6654912 (S/N 1255)**

Component  
**Compressor**

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

## 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	ASTM D7647	Limit	ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 17974	---	---
Particles >14µm	ASTM D7647	>80	▲ 1736	---	---
Particles >21µm	ASTM D7647	>20	▲ 255	---	---
Particles >38µm	ASTM D7647	>4	▲ 5	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/21/18	---	---

Customer Id: ATLPHI  
Sample No.: KC103123  
Lab Number: 05636508  
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

### 13 Apr 2022 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



### 30 Oct 2020 Diag: Doug Bogart

#### 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



### 17 Jan 2020 Diag: Jonathan Hester

#### WEAR



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other 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



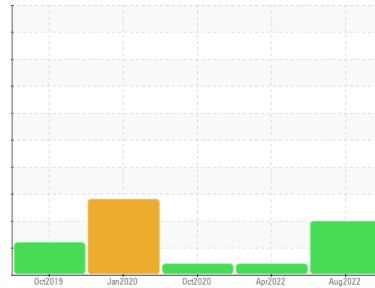
Machine Id  
**KAESER CSD 100S 6654912 (S/N 1255)**

Component

**Compressor**

Fluid

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



## 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	history 1	history 2
Sample Number			<b>KC103123</b>	KC96515	KC91812
Sample Date			<b>22 Aug 2022</b>	13 Apr 2022	30 Oct 2020
Machine Age	hrs		<b>18224</b>	15963	7636
Oil Age	hrs		<b>2531</b>	13437	4000
Oil Changed			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>&lt;1</b>	<1	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>0</b>	<1	<1
Aluminum	ppm ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Lead	ppm ASTM D5185m	>10	<b>0</b>	0	1
Copper	ppm ASTM D5185m	>50	<b>14</b>	6	12
Tin	ppm ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm ASTM D5185m		<b>---</b>	---	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>	0	9
Barium	ppm ASTM D5185m	90	<b>0</b>	9	0
Molybdenum	ppm ASTM D5185m		<b>0</b>	0	0
Manganese	ppm ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m	90	<b>27</b>	37	25
Calcium	ppm ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm ASTM D5185m		<b>1</b>	1	0
Zinc	ppm ASTM D5185m		<b>17</b>	8	21

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>&lt;1</b>	<1	<1
Sodium	ppm ASTM D5185m		<b>19</b>	11	15
Potassium	ppm ASTM D5185m	>20	<b>3</b>	0	8
Water	% ASTM D6304	>0.05	<b>0.018</b>	0.017	0.013
ppm Water	ppm ASTM D6304	>500	<b>188.0</b>	176.4	135.9

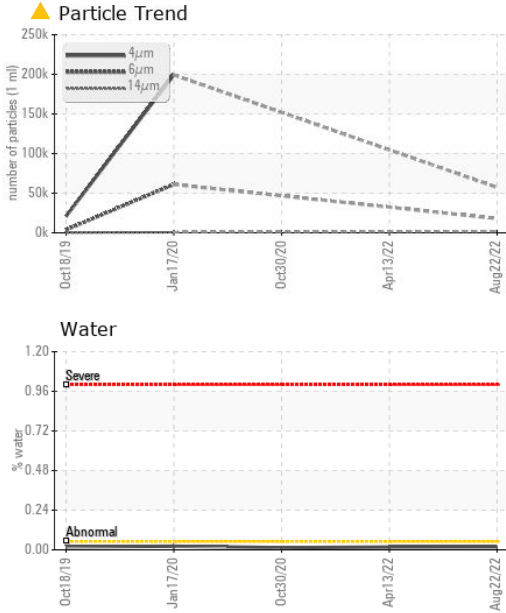
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>57344</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 17974</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>▲ 1736</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>▲ 255</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>▲ 5</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 23/21/18</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	0.4	<b>0.36</b>	0.39	0.341

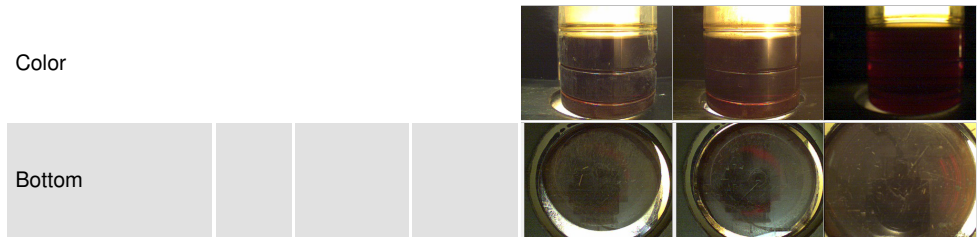
# OIL ANALYSIS REPORT



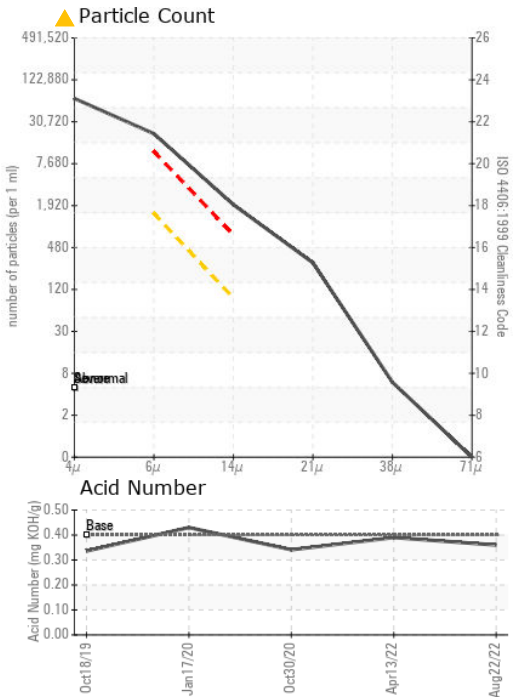
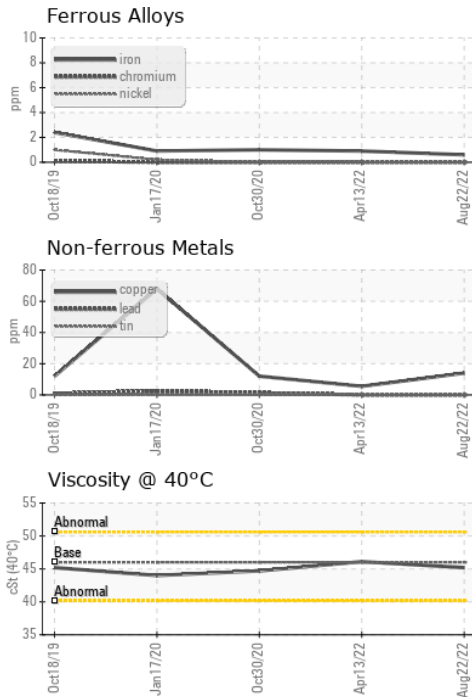
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	<b>▲ MODER</b>
Sand/Dirt	scalar	*Visual	NONE	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	<b>45.2</b>	46.1	44.7

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.** : KC103123  
**Lab Number** : 05636508  
**Unique Number** : 10126038  
**Test Package** : IND 2

ATLANTIC STATES CAST IRON PIPE - MCWANA DUCTILE  
 183 SITGREAVES ST.  
 PHILLIPSBURG, NJ  
 USA 08865  
 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: