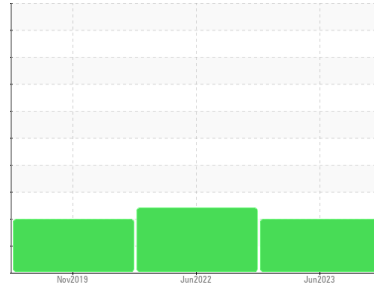




# PROBLEM SUMMARY

Sample Rating Trend



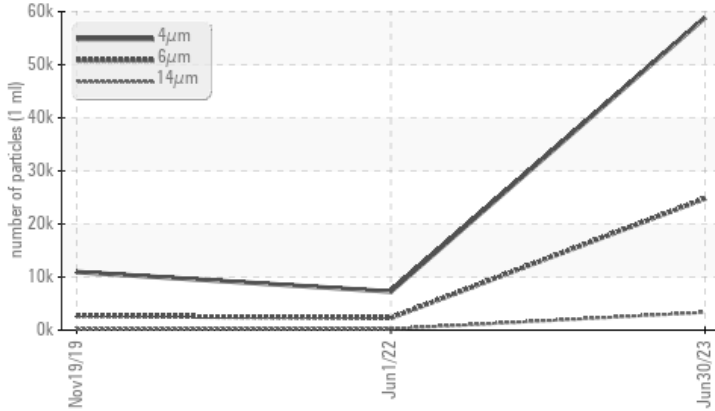
ISO



Machine Id  
**KAESER CSD 100S 3108185 (S/N 1136)**  
 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	▲ 24793	▲ 2297	▲ 2743
Particles >14µm	ASTM D7647	>80	▲ 3350	▲ 238	▲ 166
Particles >21µm	ASTM D7647	>20	▲ 1167	▲ 77	▲ 50
Particles >38µm	ASTM D7647	>4	▲ 72	▲ 14	▲ 15
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/22/19	▲ 20/18/15	▲ 19/15

Customer Id: APPBALKC  
 Sample No.: KCPA004046  
 Lab Number: 05903786  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

### 01 Jun 2022 Diag: Jonathan Hester

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



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### 19 Nov 2019 Diag: Doug Bogart

ISO



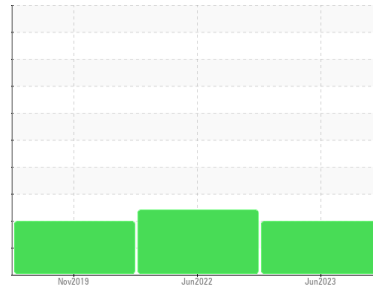
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.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

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**KAESER CSD 100S 3108185 (S/N 1136)**

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>KCPA004046</b>	KCP41427	KCP21400
Sample Date	Client Info		<b>30 Jun 2023</b>	01 Jun 2022	19 Nov 2019
Machine Age	hrs	Client Info	<b>6743</b>	5826	3746
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
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>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>4</b>	7	6
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	<1
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 90	<b>5</b>	2	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>56</b>	34	42
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>1</b>	7	<1
Zinc	ppm	ASTM D5185m	<b>0</b>	15	24
Sulfur	ppm	ASTM D5185m	<b>23193</b>	17177	15286

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>21</b>	9	18
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	0
Water	%	ASTM D6304 >0.05	<b>0.007</b>	0.025	0.018
ppm Water	ppm	ASTM D6304 >500	<b>74.8</b>	253.1	182.2

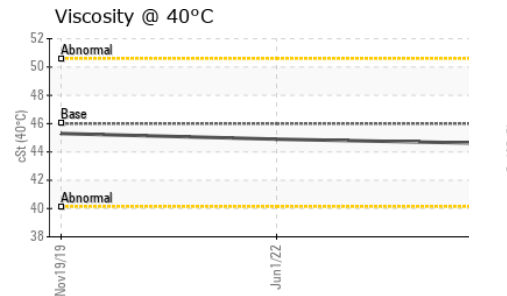
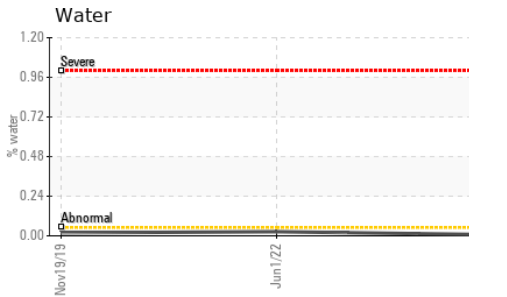
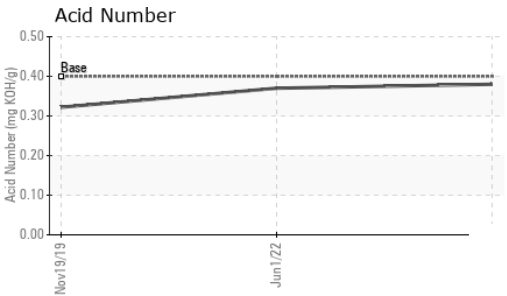
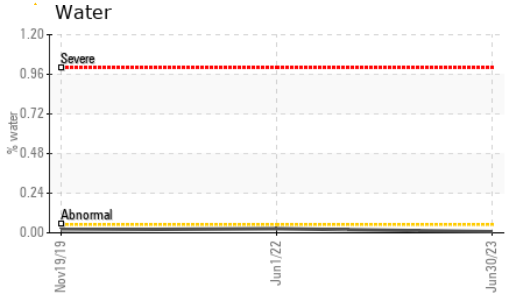
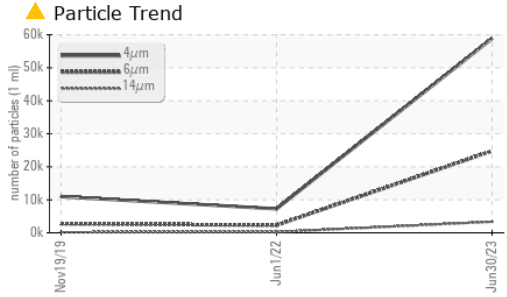
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>58871</b>	7261	10957
Particles >6µm	ASTM D7647 >1300		▲ <b>24793</b>	▲ 2297	▲ 2743
Particles >14µm	ASTM D7647 >80		▲ <b>3350</b>	▲ 238	▲ 166
Particles >21µm	ASTM D7647 >20		▲ <b>1167</b>	▲ 77	▲ 50
Particles >38µm	ASTM D7647 >4		▲ <b>72</b>	▲ 14	▲ 15
Particles >71µm	ASTM D7647 >3		▲ <b>2</b>	▲ 2	▲ 12
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>23/22/19</b>	▲ 20/18/15	▲ 19/15

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.38</b>	0.37	0.322

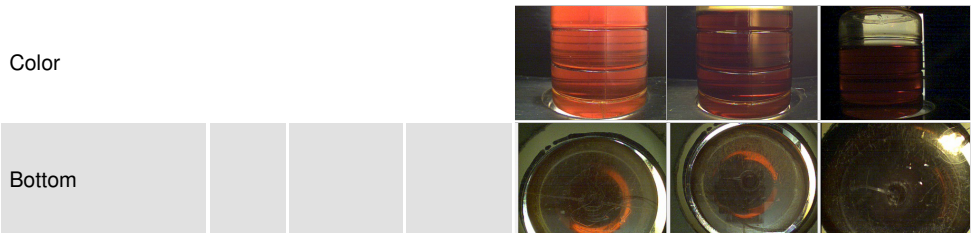
# OIL ANALYSIS REPORT



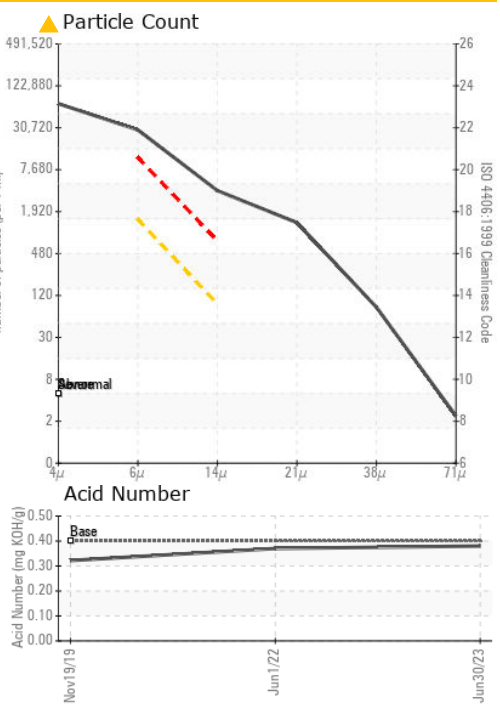
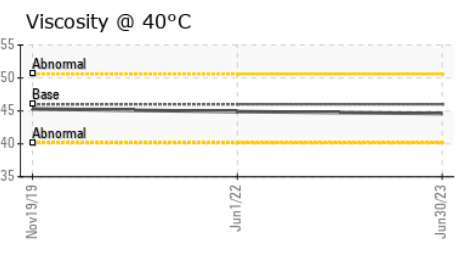
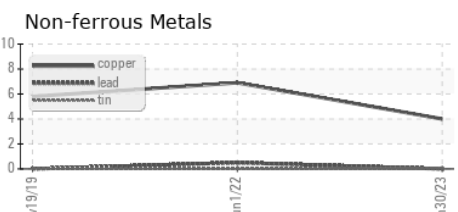
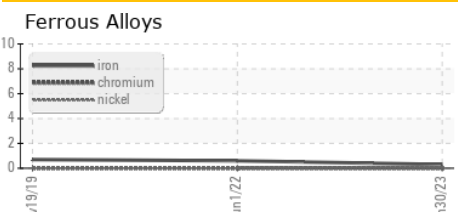
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.6	44.9	45.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004046 **Received** : 20 Jul 2023  
**Lab Number** : 05903786 **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565142 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

APPLIED COATING SYSTEMS - AALBERTS SURFACE TREATMENT  
 2915 WILMARCO AVE  
 BALTIMORE, MD  
 US 21223  
 Contact: W. PRINCE  
 wprince@aalberts-st.us

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)