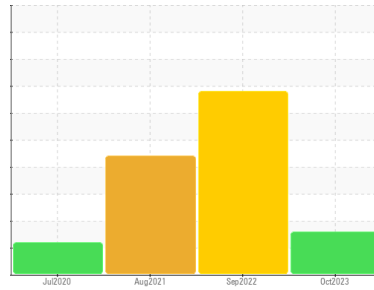




# PROBLEM SUMMARY

Sample Rating Trend

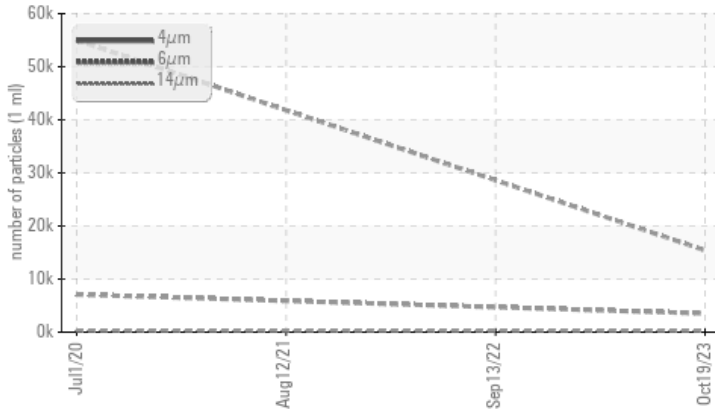


Machine Id  
**KAESER 1650796**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-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	SEVERE	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 3518	---	---
Particles >14µm	ASTM D7647	>80	▲ 221	---	---
Particles >21µm	ASTM D7647	>20	▲ 55	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	---	---

Customer Id: CITFORGA  
Sample No.: KCPA007252  
Lab Number: 05999848  
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 Sep 2022 Diag: Don Baldrige

WATER



There is too much water present in this sample to perform a particle count. 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. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report



### 12 Aug 2021 Diag: Jonathan Hester

WATER



Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. 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. Appearance is unacceptable. Free water present. There is a moderate concentration of water present in the oil. 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



### 01 Jul 2020 Diag: Angela Borella

ISO



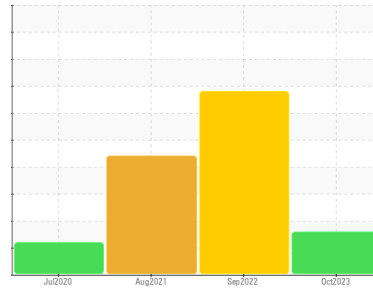
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER 1650796**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-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. The water content is negligible.

### 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>KCPA007252</b>	KCP50655	KCP42966
Sample Date	Client Info	<b>19 Oct 2023</b>	13 Sep 2022	12 Aug 2021
Machine Age	hrs	<b>23289</b>	22007	20981
Oil Age	hrs	<b>0</b>	1100	310
Oil Changed	Client Info	<b>N/A</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	SEVERE	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	2	5
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
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>0</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>6</b>	8	10
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	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	14
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 100	<b>13</b>	11	10
Calcium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m 0	<b>&lt;1</b>	11	8
Zinc	ppm	ASTM D5185m 0	<b>12</b>	22	19
Sulfur	ppm	ASTM D5185m 23500	<b>18085</b>	22141	16192

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>4</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Water	%	ASTM D6304 >0.05	<b>0.011</b>	▲ 0.413	▲ 0.731
ppm Water	ppm	ASTM D6304 >500	<b>115.1</b>	▲ 4130	▲ 7310

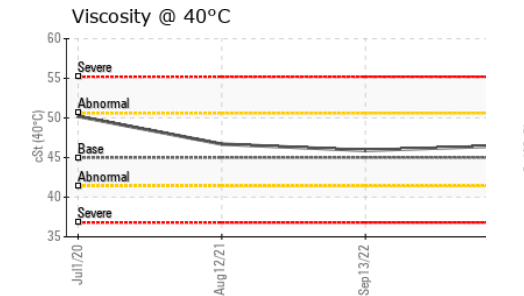
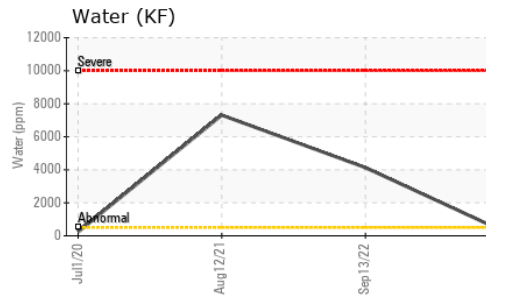
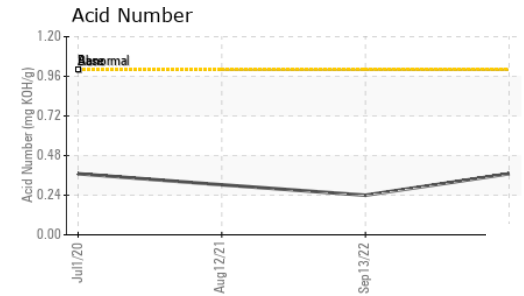
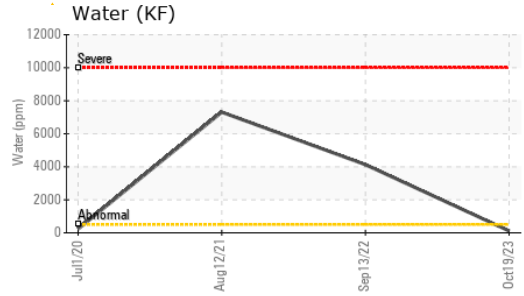
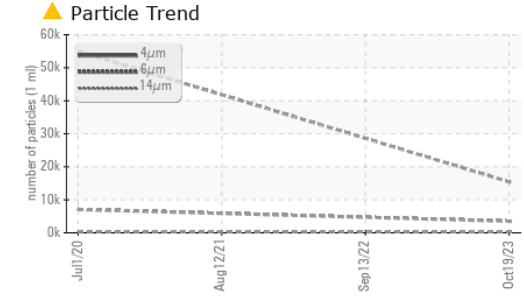
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>15419</b>	---	---
Particles >6µm	ASTM D7647 >1300	▲ <b>3518</b>	---	---
Particles >14µm	ASTM D7647 >80	▲ <b>221</b>	---	---
Particles >21µm	ASTM D7647 >20	▲ <b>55</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>4</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>21/19/15</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.37</b>	0.24	0.303

# OIL ANALYSIS REPORT

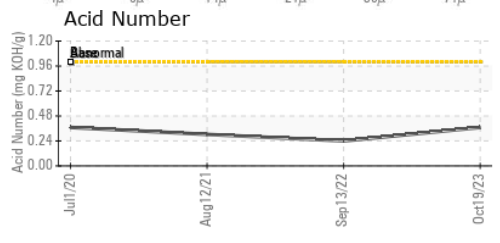
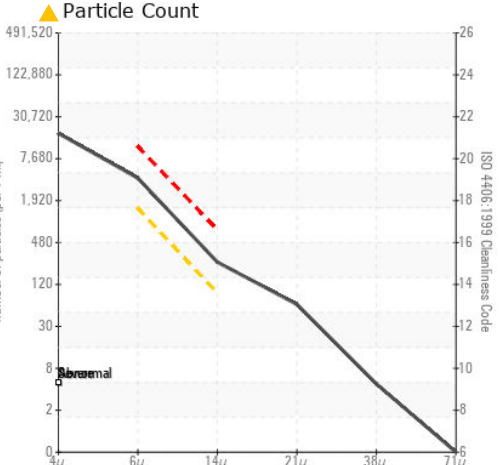
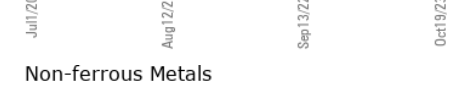
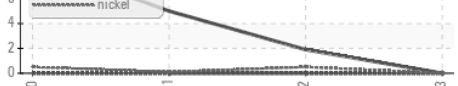


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		● >10%	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.5	45.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA007252 **Received** : 06 Nov 2023  
**Lab Number** : 05999848 **Diagnosed** : 08 Nov 2023  
**Unique Number** : 10728208 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CITY OF FOREST PARK**  
 5230 JONES RD, BLDG B  
 FOREST PARK, GA  
 US 30297  
 Contact: M. KNUDSEN  
 mknudsen@forestparkga.gov  
 T:  
 F:

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)