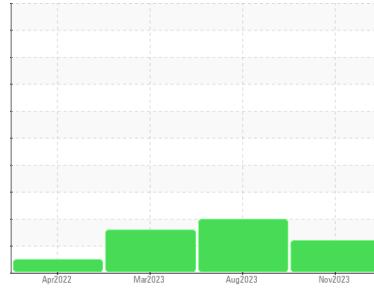




# PROBLEM SUMMARY

Sample Rating Trend

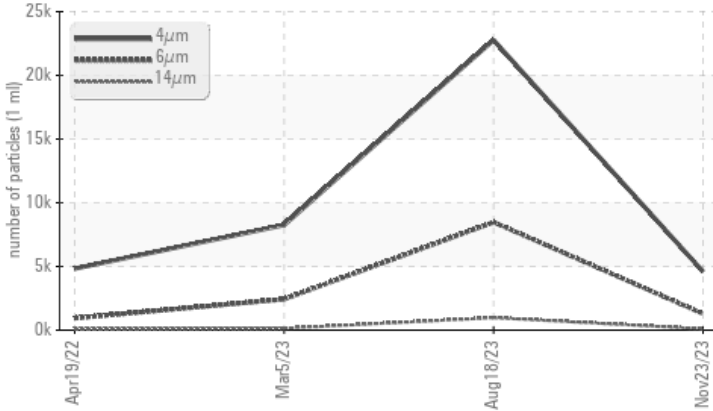


Machine Id  
**KAESER 6727331**

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			ATTENTION	ABNORMAL	ATTENTION
Particles >14µm	ASTM D7647	>80	▲ 99	▲ 979	▲ 136
Particles >21µm	ASTM D7647	>20	▲ 25	▲ 281	▲ 29
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/17/14	▲ 22/20/17	▲ 20/18/14

Customer Id: CRUSAN  
Sample No.: KCPA010071  
Lab Number: 06017354  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@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

### 18 Aug 2023 Diag: Angela Borella

ISO



The 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



### 05 Mar 2023 Diag: Don Baldrige

ISO



Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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



### 19 Apr 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

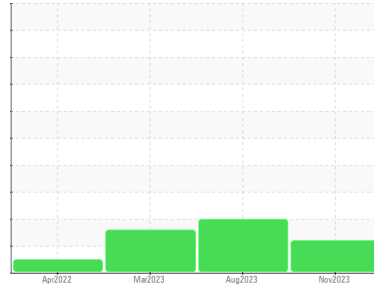
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER 6727331**

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 moderate 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>KCPA010071</b>	KCPA003605	KCP55095
Sample Date	Client Info		<b>23 Nov 2023</b>	18 Aug 2023	05 Mar 2023
Machine Age	hrs	Client Info	<b>41245</b>	38990	34938
Oil Age	hrs	Client Info	<b>0</b>	0	5000
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<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>0</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>4</b>	5	4
Tin	ppm	ASTM D5185m >10	<b>0</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 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>4</b>	0	4
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 100	<b>30</b>	14	23
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	1	2
Zinc	ppm	ASTM D5185m 0	<b>19</b>	0	11
Sulfur	ppm	ASTM D5185m 23500	<b>19114</b>	23538	17987

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	10	3
Sodium	ppm	ASTM D5185m	<b>7</b>	5	5
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304 >0.05	<b>0.005</b>	0.007	0.010
ppm Water	ppm	ASTM D6304 >500	<b>60</b>	77.1	109.7

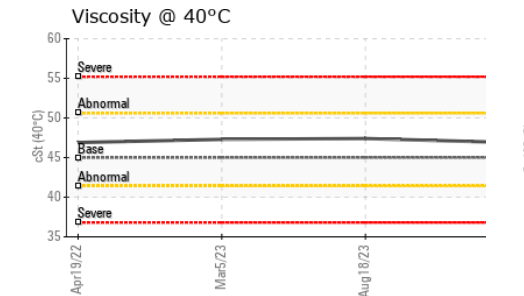
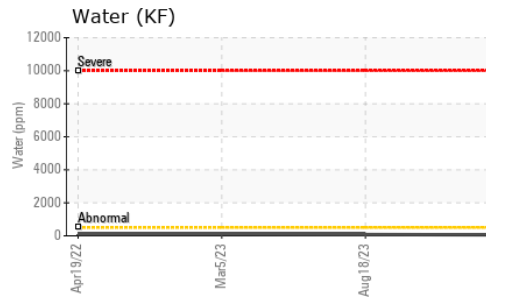
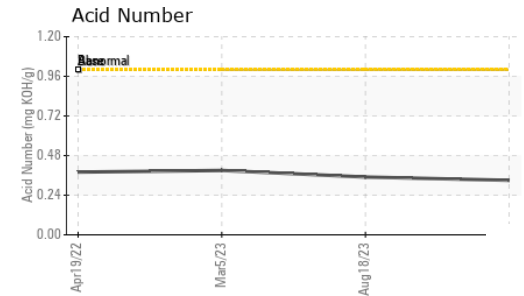
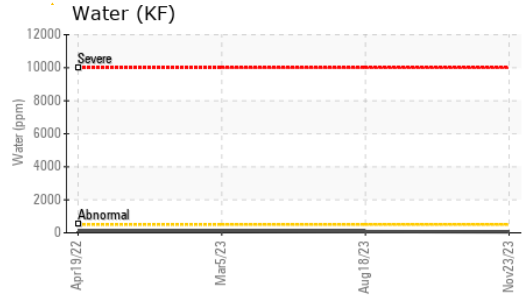
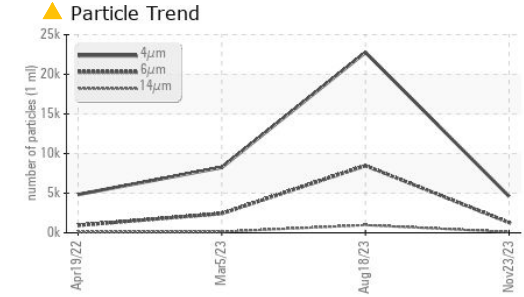
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4601</b>	22769	8251
Particles >6µm	ASTM D7647	>1300	<b>1289</b>	▲ 8478	▲ 2429
Particles >14µm	ASTM D7647	>80	▲ <b>99</b>	▲ 979	▲ 136
Particles >21µm	ASTM D7647	>20	▲ <b>25</b>	▲ 281	▲ 29
Particles >38µm	ASTM D7647	>4	<b>0</b>	▲ 13	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/17/14</b>	▲ 22/20/17	▲ 20/18/14

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.33</b>	0.35	0.39

# OIL ANALYSIS REPORT

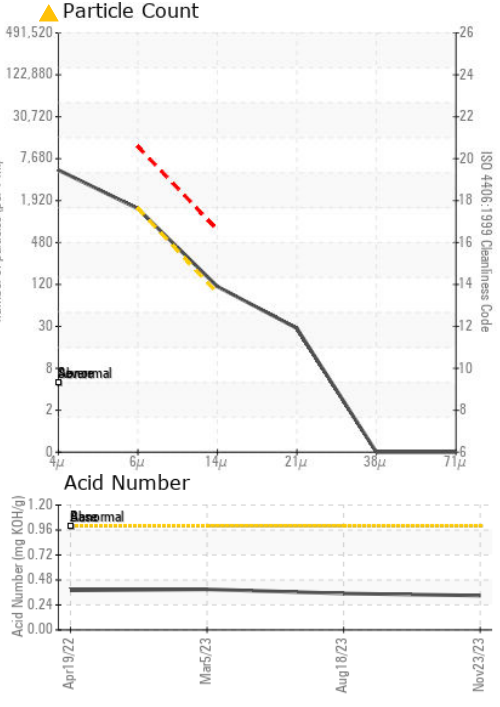
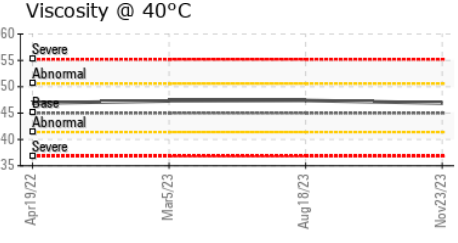
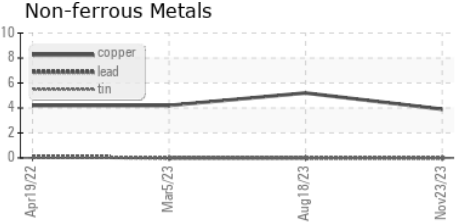
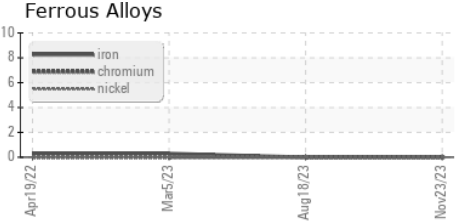


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	46.9	47.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010071 **Received** : 24 Nov 2023  
**Lab Number** : 06017354 **Diagnosed** : 29 Nov 2023  
**Unique Number** : 10756498 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CRUISE LLC dba CRUISE**  
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 SAN FRANCISCO, CA  
 US 94103  
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 DYLAN.EHRENBARGER@GETCRUISE.COM  
 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)