

# PROBLEM SUMMARY

## Sample Rating Trend

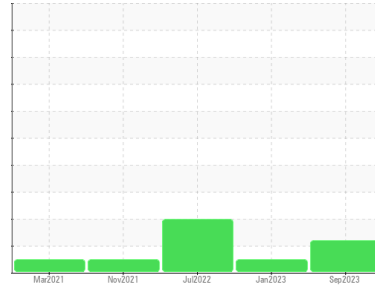
ISO



Machine Id  
**7292517 (S/N 1598)**

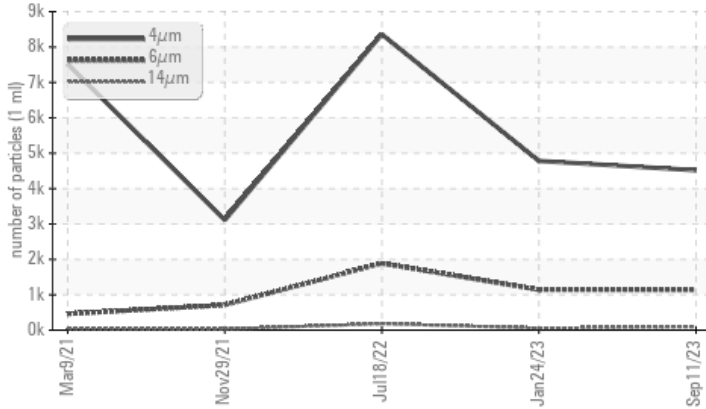
Component  
**Compressor**

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			ATTENTION	NORMAL	ABNORMAL
Particles >14µm	ASTM D7647	>80	▲ <b>88</b>	56	▲ 182
Particles >21µm	ASTM D7647	>20	▲ <b>28</b>	15	▲ 63
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/17/14</b>	19/17/13	▲ 20/18/15

Customer Id: INSCUM  
Sample No.: KCPA002183  
Lab Number: 05962899  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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

### 24 Jan 2023 Diag: Jonathan Hester

NORMAL



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

view report



### 18 Jul 2022 Diag: Don Baldrige

ISO



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. 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



### 29 Nov 2021 Diag: Angela Borella

NORMAL



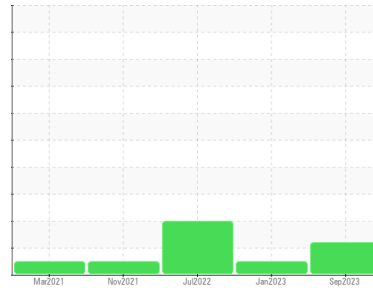
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable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

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**7292517 (S/N 1598)**

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 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>KCPA002183</b>	KCP49200	KCP51667
Sample Date	Client Info		<b>11 Sep 2023</b>	24 Jan 2023	18 Jul 2022
Machine Age	hrs	Client Info	<b>20583</b>	15156	10591
Oil Age	hrs	Client Info	<b>0</b>	8566	4001
Oil Changed	Client Info		<b>N/A</b>	Changed	Not Chngd
Sample Status			<b>ATTENTION</b>	NORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	0
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>&lt;1</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>5</b>	7	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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>0</b>	20	41
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>43</b>	53	70
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	1	<1
Phosphorus	ppm	ASTM D5185m	<b>3</b>	0	1
Zinc	ppm	ASTM D5185m	<b>0</b>	10	2
Sulfur	ppm	ASTM D5185m	<b>17814</b>	19277	21158

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	2	0
Sodium	ppm	ASTM D5185m	<b>13</b>	16	18
Potassium	ppm	ASTM D5185m >20	<b>3</b>	5	2
Water	%	ASTM D6304 >0.05	<b>0.031</b>	0.018	0.041
ppm Water	ppm	ASTM D6304 >500	<b>319.7</b>	184.4	416.3

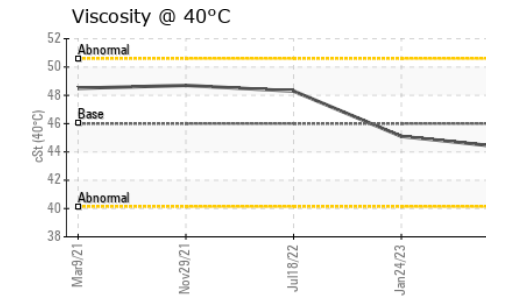
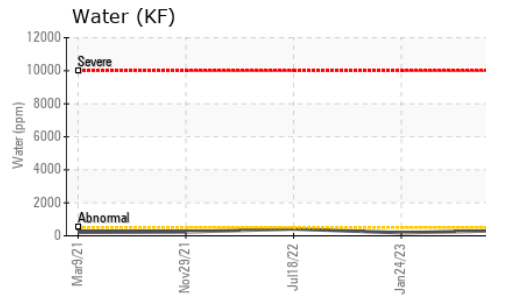
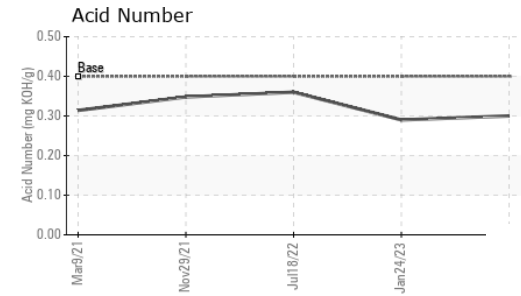
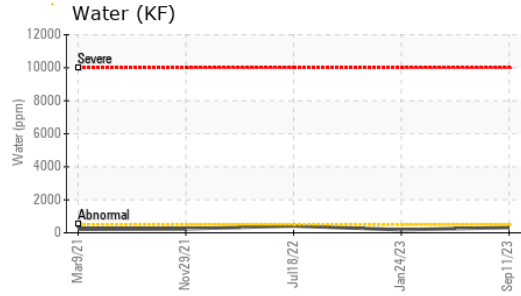
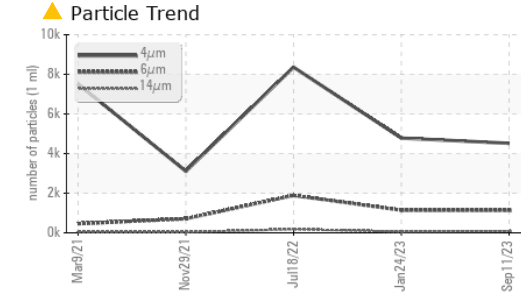
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4518</b>	4781	8360
Particles >6µm	ASTM D7647 >1300		<b>1136</b>	1142	▲ 1886
Particles >14µm	ASTM D7647 >80		▲ <b>88</b>	56	▲ 182
Particles >21µm	ASTM D7647 >20		▲ <b>28</b>	15	▲ 63
Particles >38µm	ASTM D7647 >4		<b>3</b>	2	▲ 5
Particles >71µm	ASTM D7647 >3		<b>2</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/17/14</b>	19/17/13	▲ 20/18/15

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.30</b>	0.29	0.36

# OIL ANALYSIS REPORT

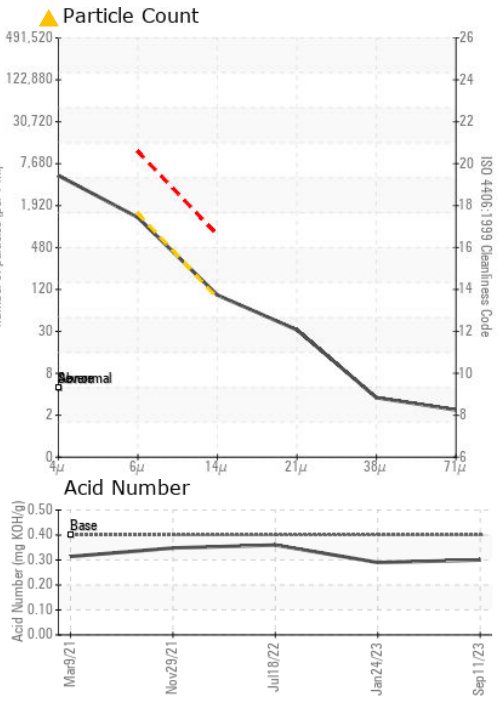
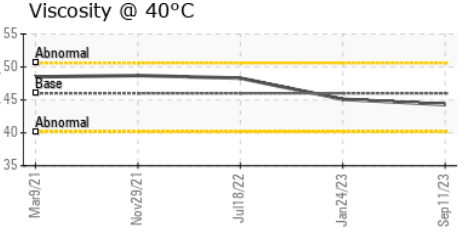
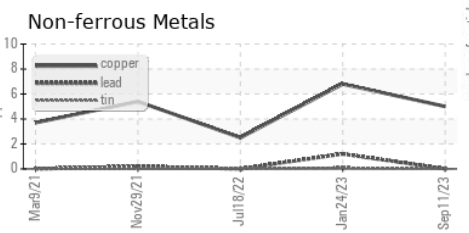
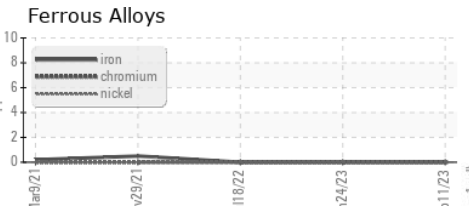


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

PARAMETER	method	limit/base	current	history1	history2
FLUID PROPERTIES					
Visc @ 40°C	cSt	ASTM D445 46	44.3	45.1	48.3

PARAMETER	method	limit/base	current	history1	history2
SAMPLE IMAGES					
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA002183 **Received** : 27 Sep 2023  
**Lab Number** : 05962899 **Diagnosed** : 28 Sep 2023  
**Unique Number** : 10669450 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**INSERT MOLDING SOLUTIONS**  
 4465 ALICIA LN  
 CUMMING, GA  
 US 30028  
 Contact: PAUL  
 paul@makerammo.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)