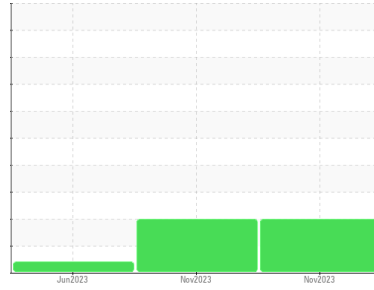




# PROBLEM SUMMARY

## Sample Rating Trend



ISO



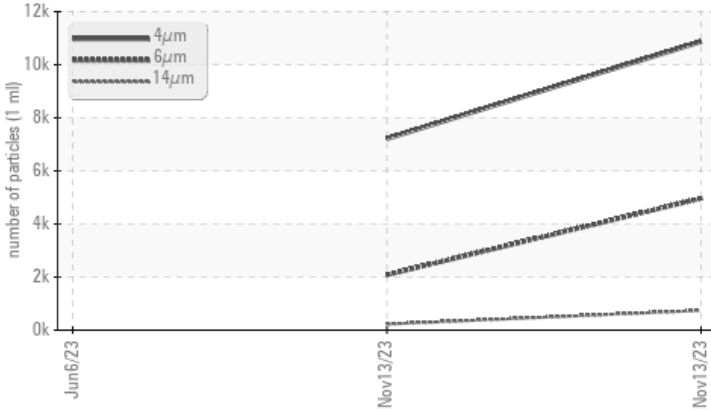
Machine Id  
**KAESER 8324583**

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			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>2083</b>	▲ 4963	---
Particles >14µm	ASTM D7647	>80	▲ <b>227</b>	▲ 742	---
Particles >21µm	ASTM D7647	>20	▲ <b>77</b>	▲ 221	---
Particles >38µm	ASTM D7647	>4	▲ <b>7</b>	▲ 11	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/18/15</b>	▲ 21/19/17	---

**Customer Id:** SYNRED  
**Sample No.:** KCPA003806  
**Lab Number:** 06025748  
**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 Nov 2023 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



### 06 Jun 2023 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.

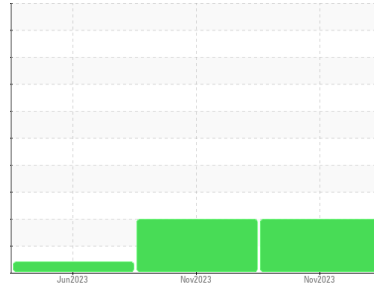
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER 8324583**  
 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.

### 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>KCPA003806</b>	KCPA007291	KCPA003932
Sample Date	Client Info		<b>13 Nov 2023</b>	13 Nov 2023	06 Jun 2023
Machine Age	hrs	Client Info	<b>7666</b>	7666	3950
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	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>	<1	0
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	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>15</b>	5	4
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	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 0	<b>0</b>	0	0
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>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>4</b>	1	34
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 0	<b>2</b>	4	0
Zinc	ppm	ASTM D5185m 0	<b>55</b>	0	6
Sulfur	ppm	ASTM D5185m 23500	<b>19944</b>	17486	20091

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>2</b>	0	22
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	2
Water	%	ASTM D6304 >0.05	<b>0.009</b>	0.007	0.008
ppm Water	ppm	ASTM D6304 >500	<b>94</b>	80	88.7

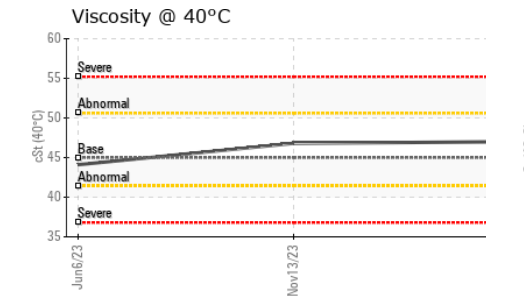
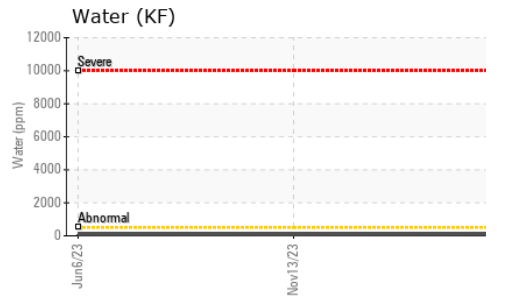
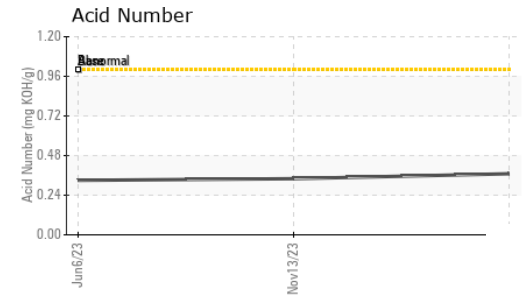
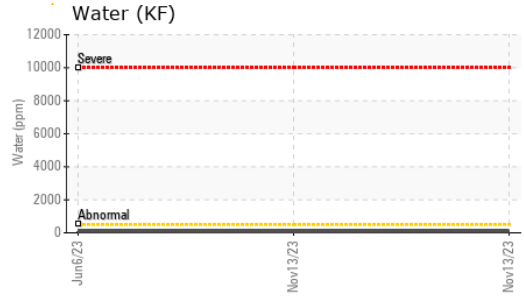
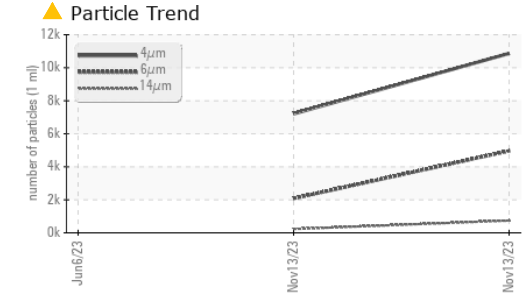
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>7207</b>	10867	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 2083</b>	▲ 4963	---
Particles >14µm	ASTM D7647	>80	<b>▲ 227</b>	▲ 742	---
Particles >21µm	ASTM D7647	>20	<b>▲ 77</b>	▲ 221	---
Particles >38µm	ASTM D7647	>4	<b>▲ 7</b>	▲ 11	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 20/18/15</b>	▲ 21/19/17	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.37</b>	0.34	0.33

# OIL ANALYSIS REPORT

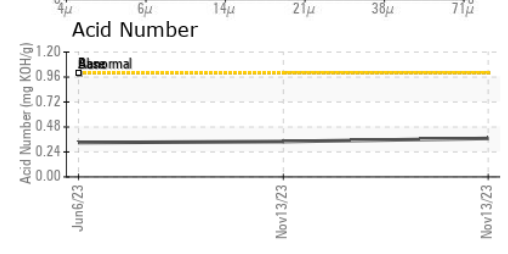
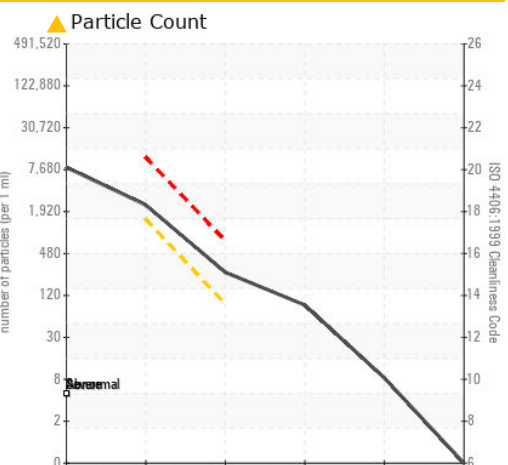
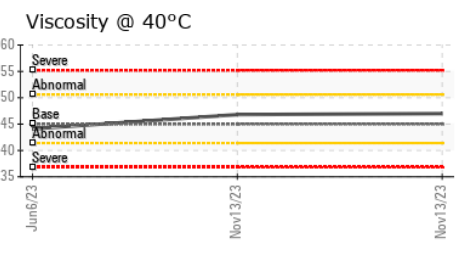
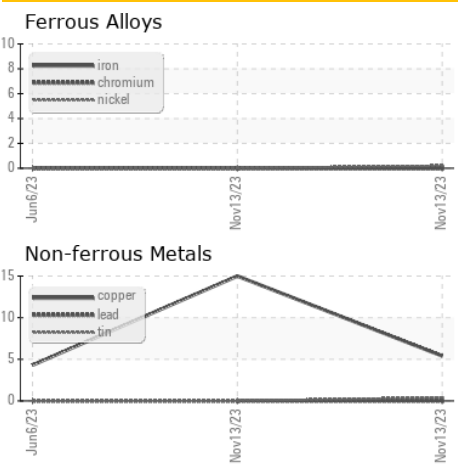


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.0	46.8	44.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA003806 **Received** : 05 Dec 2023  
**Lab Number** : 06025748 **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10775539 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SYNTHEGO CORP**  
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 REDWOOD CITY, CA  
 US 94063  
 Contact: JOE GARCIA  
 joegarcia@synthego.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)