



# PROBLEM SUMMARY

Sample Rating Trend



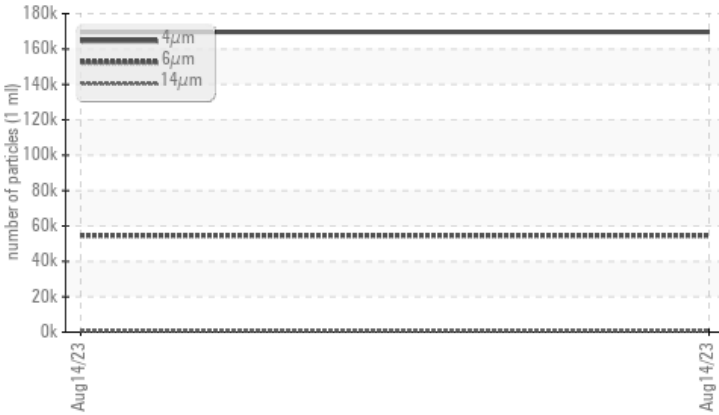
ISO



Machine Id  
**1430226 (S/N 3110181)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

Oil and 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>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>54579</b>	---	---
Particles >14µm	ASTM D7647	>80	▲ <b>861</b>	---	---
Particles >21µm	ASTM D7647	>20	▲ <b>142</b>	---	---
Particles >38µm	ASTM D7647	>4	▲ <b>8</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>25/23/17</b>	---	---

Customer Id: SMIHIG  
 Sample No.: KCPA006600  
 Lab Number: 05930420  
 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

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**1430226 (S/N 3110181)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and 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>KCPA006600</b>	---	---
Sample Date	Client Info		<b>14 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>77784</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>11</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	---	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>25</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

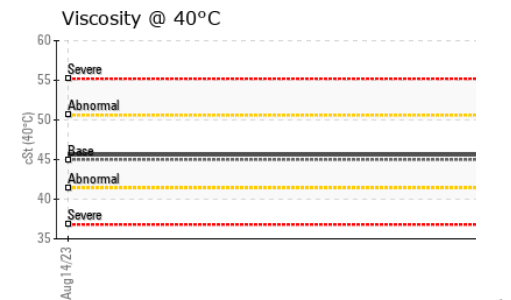
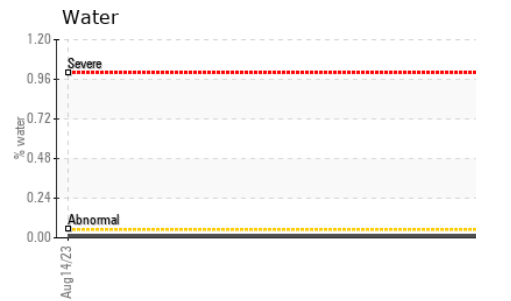
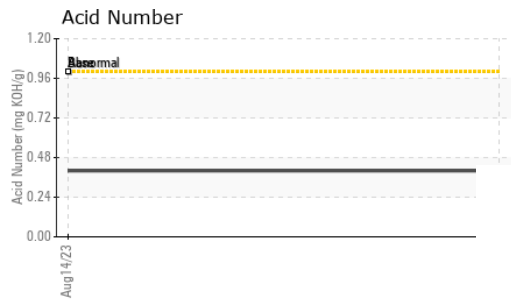
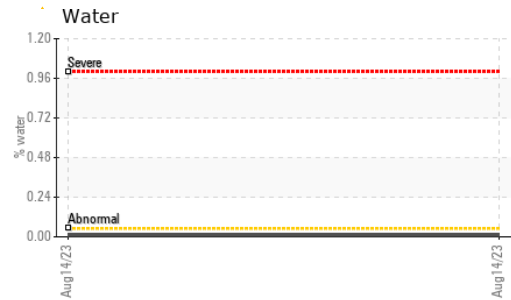
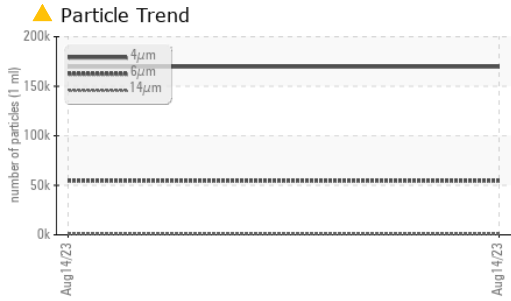
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m 100	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m 0	<b>112</b>	---	---
Zinc	ppm	ASTM D5185m 0	<b>51</b>	---	---
Sulfur	ppm	ASTM D5185m 23500	<b>20382</b>	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	---	---
Sodium	ppm	ASTM D5185m	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Water	%	ASTM D6304 >0.05	<b>0.010</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>105.3</b>	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>169615</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>54579</b>	---	---
Particles >14µm	ASTM D7647	>80	▲ <b>861</b>	---	---
Particles >21µm	ASTM D7647	>20	▲ <b>142</b>	---	---
Particles >38µm	ASTM D7647	>4	▲ <b>8</b>	---	---
Particles >71µm	ASTM D7647	>3	▲ <b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>25/23/17</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.40</b>	---	---

# OIL ANALYSIS REPORT



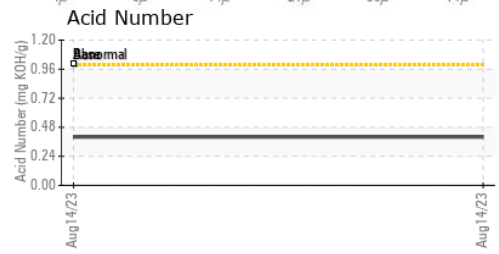
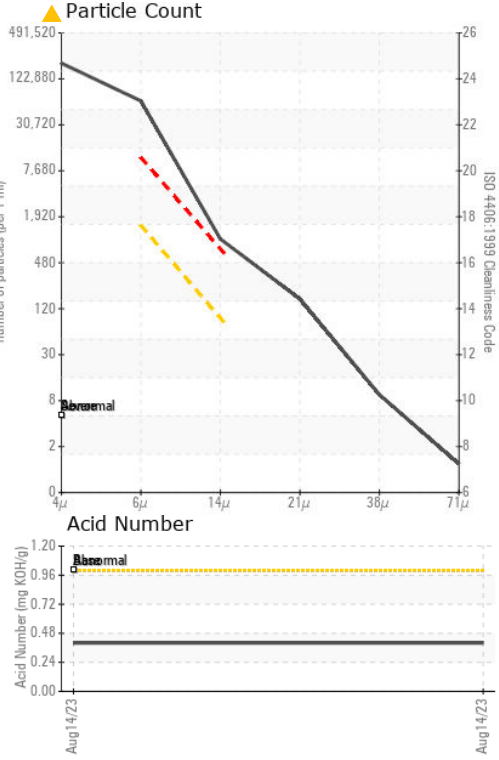
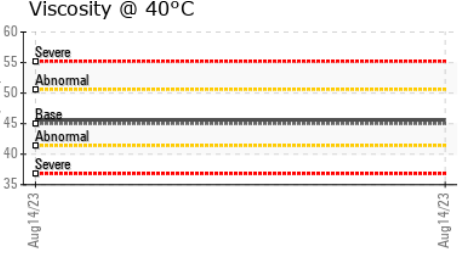
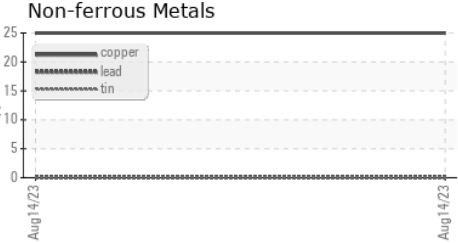
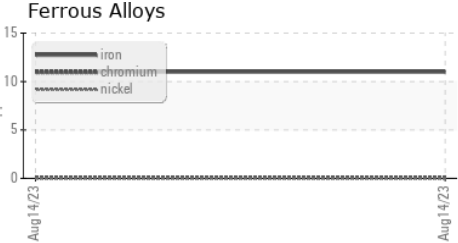
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	LIGHT	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	45.6	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006600 **Received** : 21 Aug 2023  
**Lab Number** : 05930420 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10615691 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SMITHFIELD LTD**  
 2224 SHORE ST  
 HIGH POINT, NC  
 US 27263  
 Contact: Service Manager

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)