



# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**1430590 (S/N 3111411)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCP48406D</b>	---	---
Sample Date	Client Info	<b>30 Aug 2023</b>	---	---
Machine Age	hrs Client Info	<b>44496</b>	---	---
Oil Age	hrs Client Info	<b>8000</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>&lt;1</b>	---	---
Chromium ppm ASTM D5185m	>10	<b>0</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>13</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>10</b>	---	---
Calcium ppm ASTM D5185m	0	<b>0</b>	---	---
Phosphorus ppm ASTM D5185m	0	<b>0</b>	---	---
Zinc ppm ASTM D5185m	0	<b>72</b>	---	---
Sulfur ppm ASTM D5185m	23500	<b>18256</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>25	<b>▲ 42</b>	---	---
Sodium ppm ASTM D5185m		<b>5</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>0</b>	---	---
Water % ASTM D6304	>0.05	<b>0.013</b>	---	---
ppm Water ppm ASTM D6304	>500	<b>137</b>	---	---

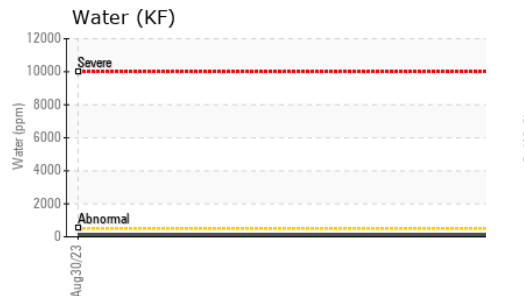
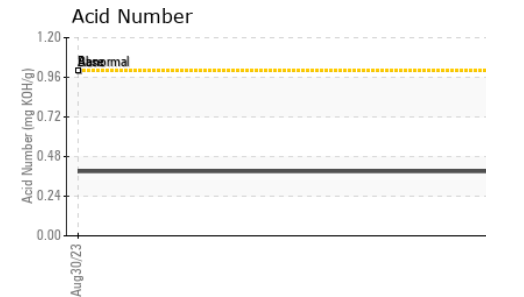
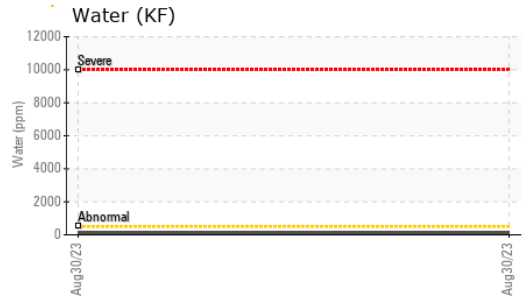
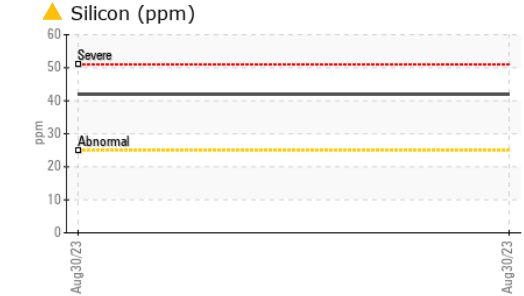
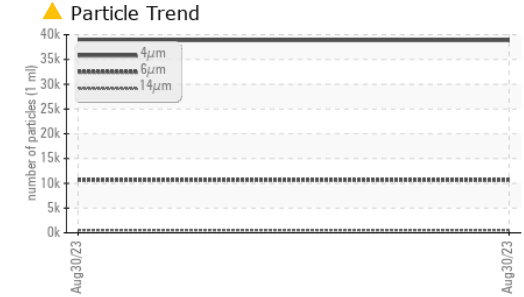
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		<b>38869</b>	---	---
Particles >6µm ASTM D7647	>1300	<b>▲ 10663</b>	---	---
Particles >14µm ASTM D7647	>80	<b>▲ 528</b>	---	---
Particles >21µm ASTM D7647	>20	<b>▲ 142</b>	---	---
Particles >38µm ASTM D7647	>4	<b>▲ 12</b>	---	---
Particles >71µm ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness ISO 4406 (c)	>--/17/13	<b>▲ 22/21/16</b>	---	---

## FLUID DEGRADATION

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

# OIL ANALYSIS REPORT



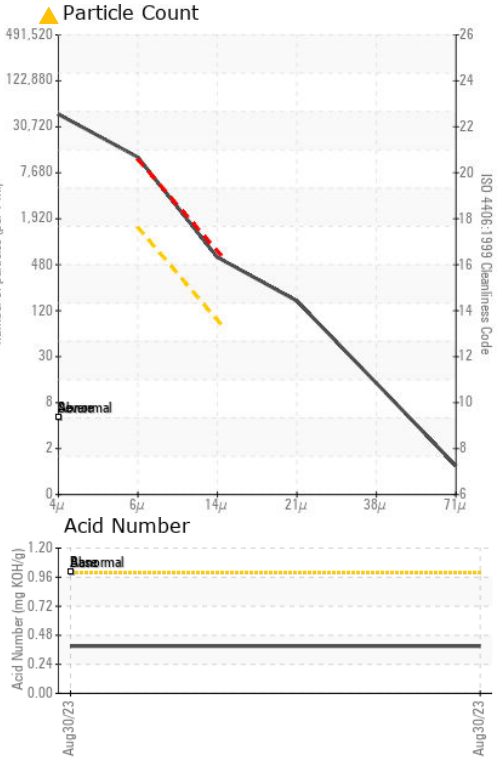
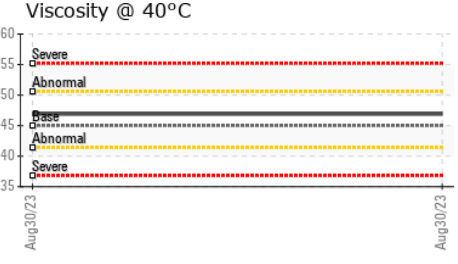
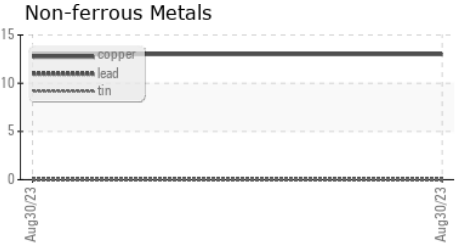
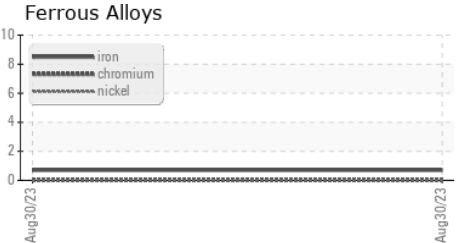
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	<b>46.9</b>	---

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.** : KCP48406D **Received** : 30 Jan 2024  
**Lab Number** : 06073939 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856030 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BADGER GRANITEWERKS**  
 400 VENTURE CT  
 VERONA, WI  
 US 53593  
 Contact: Service Manager

Certificate L2367  
 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)

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F: