



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER CSD 100ST 4486681 (S/N 1015)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. 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>KCPA013591</b>	---	---
Sample Date	Client Info	<b>10 Apr 2024</b>	---	---
Machine Age	hrs Client Info	<b>10354</b>	---	---
Oil Age	hrs Client Info	<b>762</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>&lt;1</b>	---	---
Lead ppm	ASTM D5185m >10	<b>0</b>	---	---
Copper ppm	ASTM D5185m >50	<b>2</b>	---	---
Tin ppm	ASTM D5185m >10	<b>&lt;1</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>26</b>	---	---
Molybdenum ppm	ASTM D5185m 0	<b>0</b>	---	---
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium ppm	ASTM D5185m 100	<b>74</b>	---	---
Calcium ppm	ASTM D5185m 0	<b>6</b>	---	---
Phosphorus ppm	ASTM D5185m 0	<b>4</b>	---	---
Zinc ppm	ASTM D5185m 0	<b>0</b>	---	---
Sulfur ppm	ASTM D5185m 23500	<b>21950</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	<b>5</b>	---	---
Sodium ppm	ASTM D5185m	<b>21</b>	---	---
Potassium ppm	ASTM D5185m >20	<b>5</b>	---	---
Water %	ASTM D6304 >0.05	<b>0.027</b>	---	---
ppm Water ppm	ASTM D6304 >500	<b>275</b>	---	---

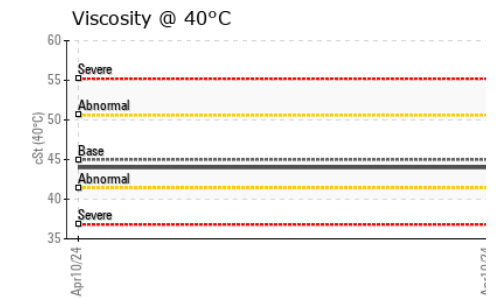
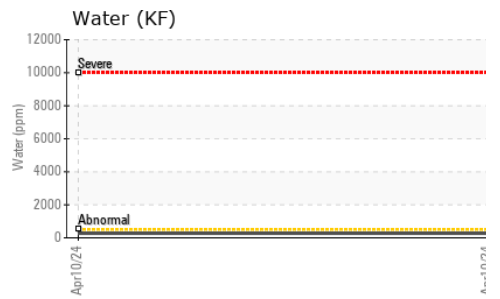
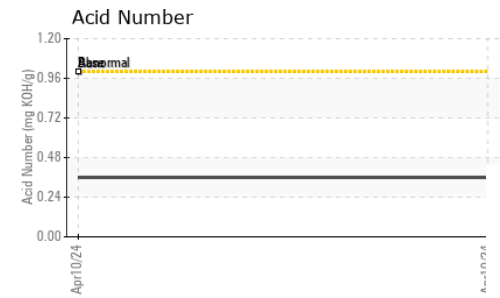
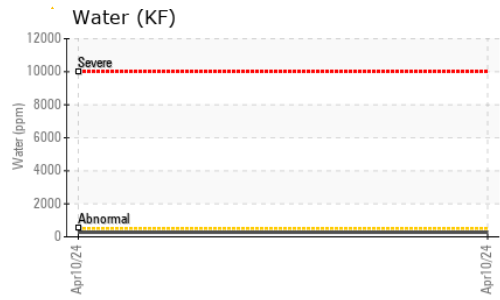
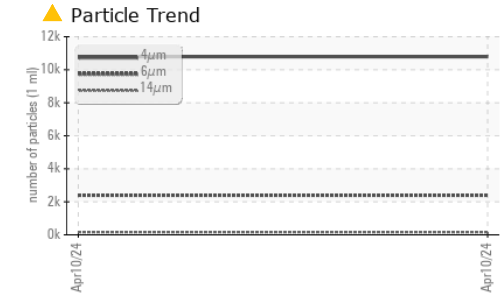
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>10791</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 2396</b>	---	---
Particles >14µm	ASTM D7647 >80	<b>▲ 161</b>	---	---
Particles >21µm	ASTM D7647 >20	<b>▲ 39</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 21/18/15</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 1.0	<b>0.36</b>	---	---

# OIL ANALYSIS REPORT



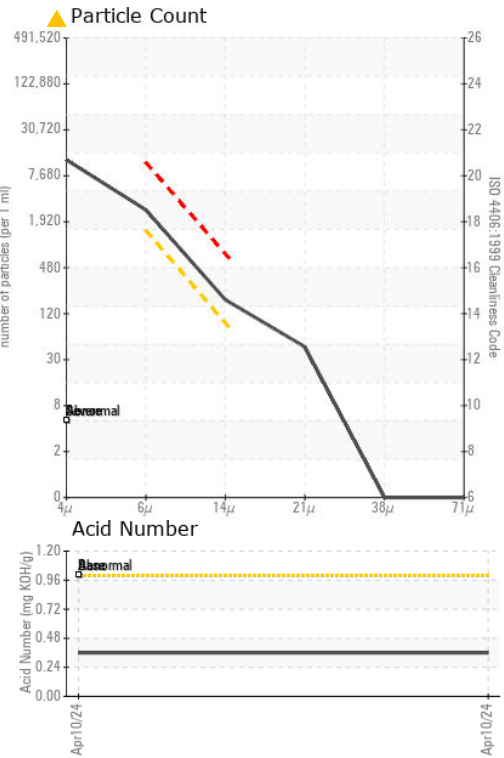
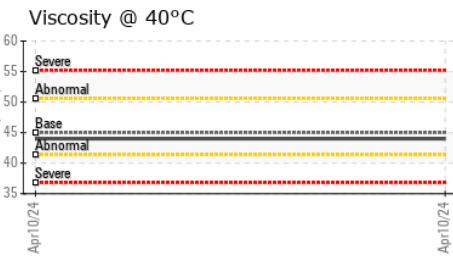
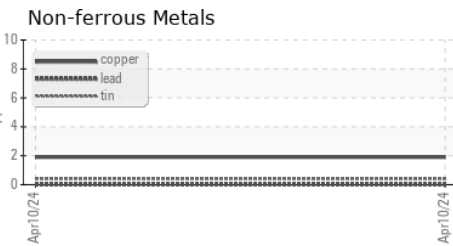
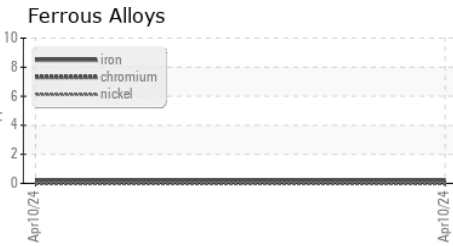
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.0	---

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.** : KCPA013591 **Received** : 17 Apr 2024  
**Lab Number** : 06152603 **Tested** : 19 Apr 2024  
**Unique Number** : 10982681 **Diagnosed** : 22 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**AXYGEN SCIENTIFIC INC - WESTERN ALLIED MECH**  
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 US 94587  
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 jeffery@westernallied.com

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)