



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER AIRTOWER 5C 7782137 (S/N 1230)**  
 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA016833</b>	---	---
Sample Date	Client Info	<b>02 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>2524</b>	---
Oil Age	hrs	Client Info	<b>2524</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>&lt;1</b>	---	---
Nickel ppm	ASTM D5185m >3	<b>1</b>	---	---
Titanium ppm	ASTM D5185m >3	<b>&lt;1</b>	---	---
Silver ppm	ASTM D5185m >2	<b>0</b>	---	---
Aluminum ppm	ASTM D5185m >10	<b>1</b>	---	---
Lead ppm	ASTM D5185m >10	<b>1</b>	---	---
Copper ppm	ASTM D5185m >50	<b>12</b>	---	---
Tin ppm	ASTM D5185m >10	<b>1</b>	---	---
Vanadium ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium ppm	ASTM D5185m	<b>&lt;1</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>1</b>	---	---
Manganese ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium ppm	ASTM D5185m 100	<b>&lt;1</b>	---	---
Calcium ppm	ASTM D5185m 0	<b>3</b>	---	---
Phosphorus ppm	ASTM D5185m 0	<b>8</b>	---	---
Zinc ppm	ASTM D5185m 0	<b>4</b>	---	---
Sulfur ppm	ASTM D5185m 23500	<b>18985</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	<b>&lt;1</b>	---	---
Sodium ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Potassium ppm	ASTM D5185m >20	<b>3</b>	---	---
Water %	ASTM D6304 >0.05	<b>0.029</b>	---	---
ppm Water	ASTM D6304 >500	<b>295</b>	---	---

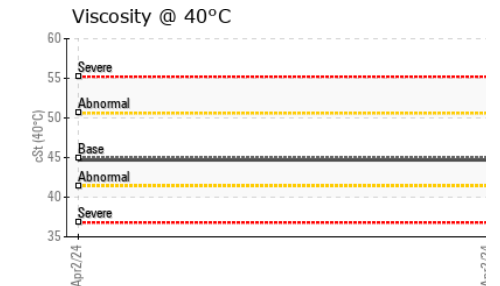
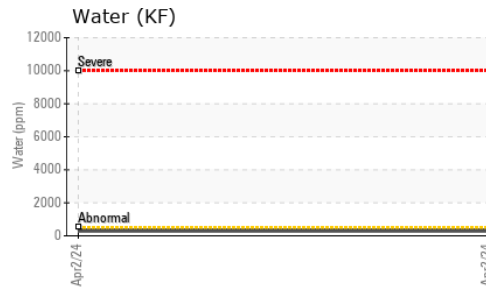
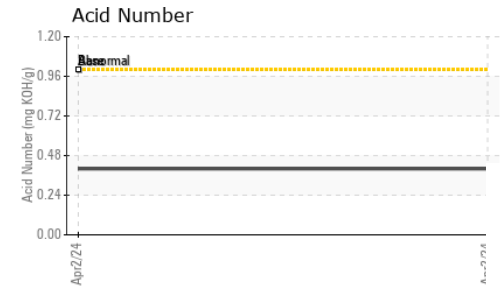
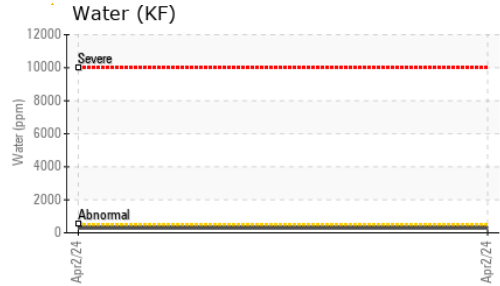
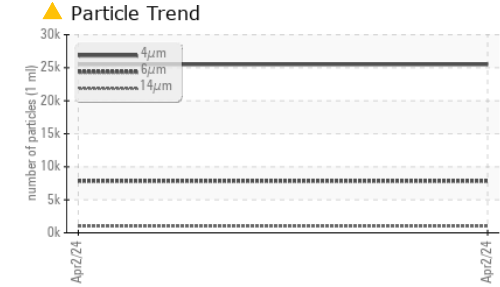
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>25496</b>	---	---
Particles >6µm	ASTM D7647 >1300	▲ <b>7853</b>	---	---
Particles >14µm	ASTM D7647 >80	▲ <b>992</b>	---	---
Particles >21µm	ASTM D7647 >20	▲ <b>264</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>2</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>22/20/17</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



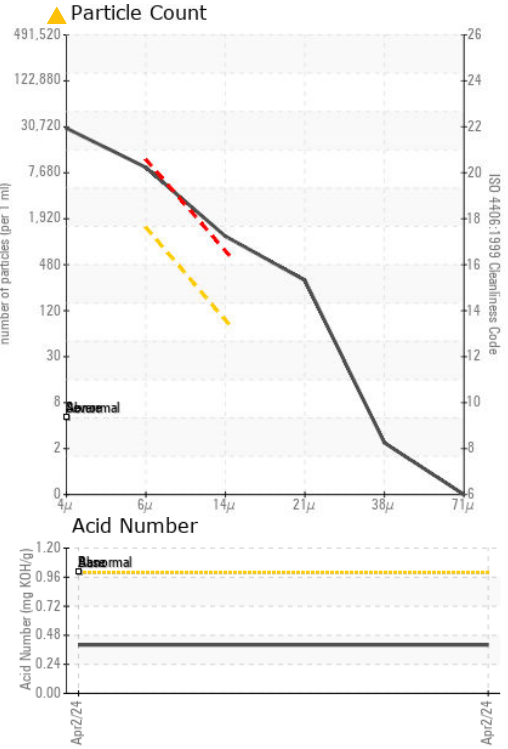
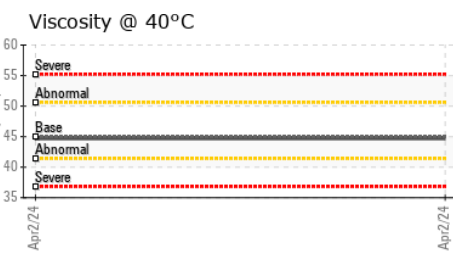
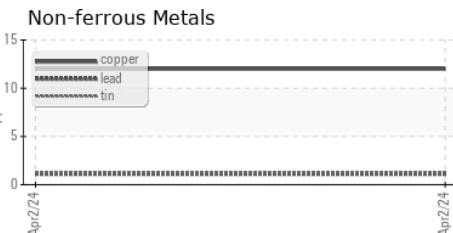
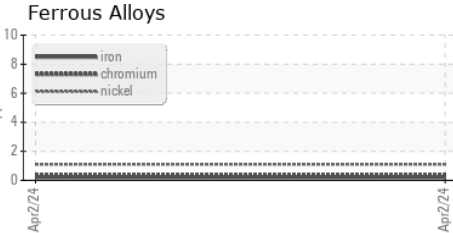
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016833  
**Lab Number** : 06146616  
**Unique Number** : 10976694  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 11 Apr 2024  
**Tested** : 12 Apr 2024  
**Diagnosed** : 16 Apr 2024 - Angela Borella

**OLD DOMINION FREIGHT LINE INC**  
 4380 DURAFORM LN  
 WINDSOR, WI  
 US 53598  
 Contact: MATT KITTELL  
 matt.kittell@odfl.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)