



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**8647083 (S/N 1685)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate 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>KCPA016378</b>	---	---
Sample Date	Client Info			<b>06 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>6116</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

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

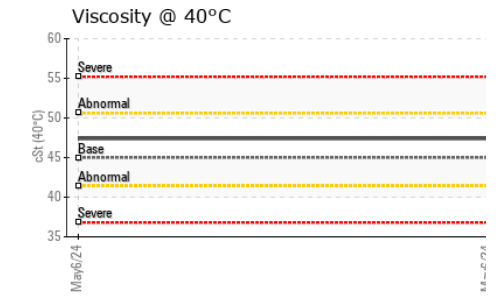
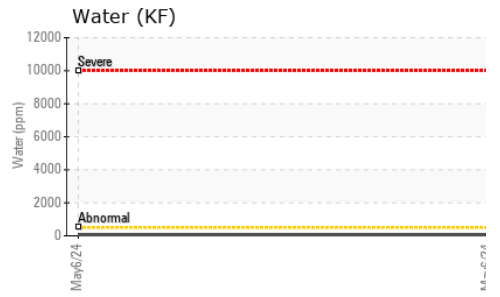
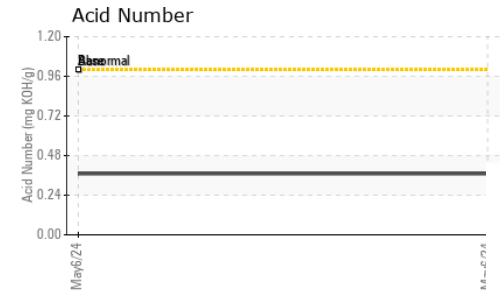
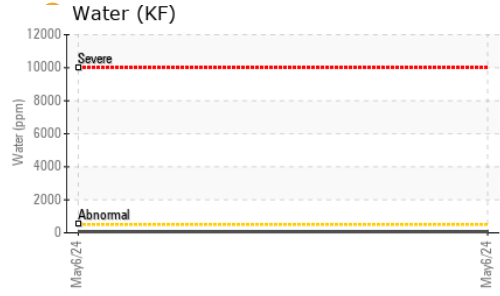
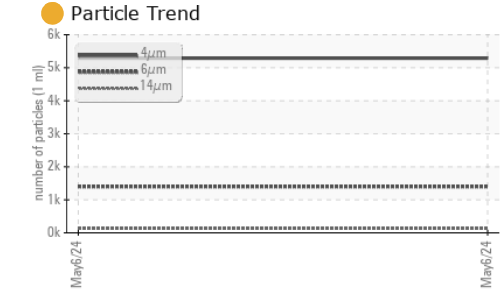
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	90	<b>3</b>	---	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	100	<b>16</b>	---	---
Calcium	ppm	ASTM D5185m	0	<b>&lt;1</b>	---	---
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	---	---
Zinc	ppm	ASTM D5185m	0	<b>17</b>	---	---
Sulfur	ppm	ASTM D5185m	23500	<b>20668</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.006</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>69</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>5288</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>1402</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>125</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>33</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>20/18/14</b>	---	---

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

# OIL ANALYSIS REPORT

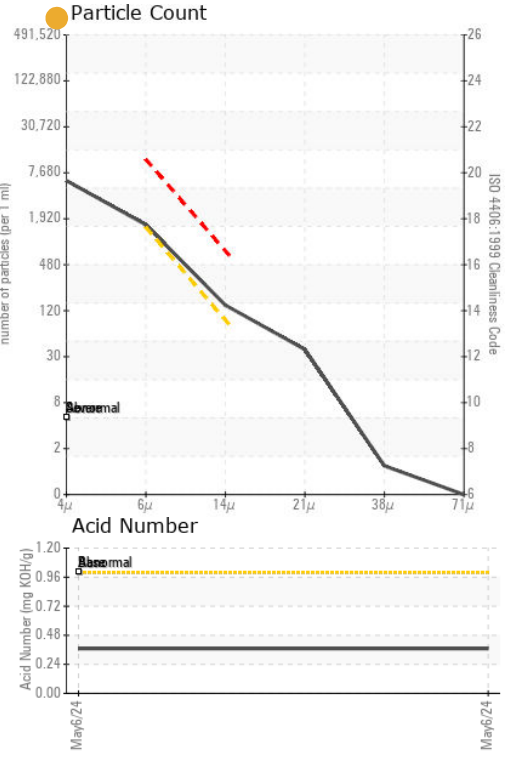
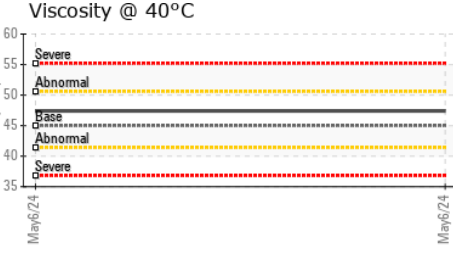
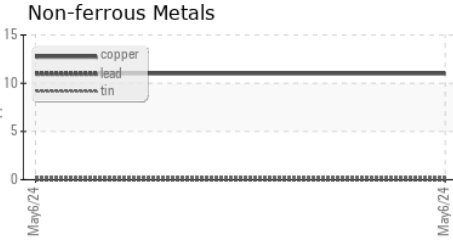
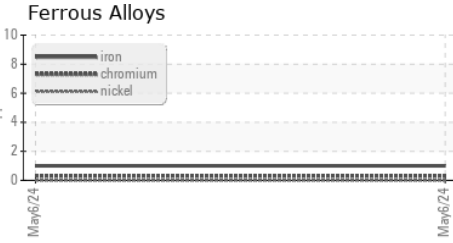


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual NONE	<b>LIGHT</b>	---	---
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>47.4</b>	---	---

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.** : KCPA016378 **Received** : 10 May 2024  
**Lab Number** : **06175486** **Tested** : 14 May 2024  
**Unique Number** : 11021539 **Diagnosed** : 14 May 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**FREEMAN EXPOSITIONS LLC**  
 3456 E MIRALOMA AVE  
 ANAHEIM, CA  
 US 92806  
 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)

T:  
F: