



# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**1161434 (S/N 4101004)**  
 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 moderate amount of particulates present in the oil.

### Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA013319</b>	---	---
Sample Date	Client Info			<b>11 Mar 2024</b>	---	---
Machine Age	hrs	Client Info		<b>66712</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>2</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>7</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

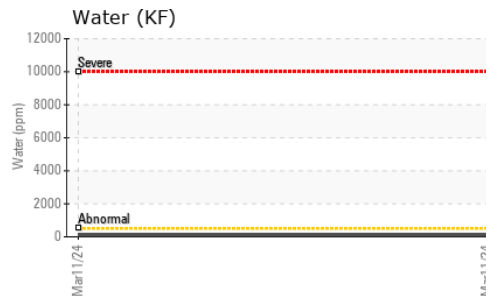
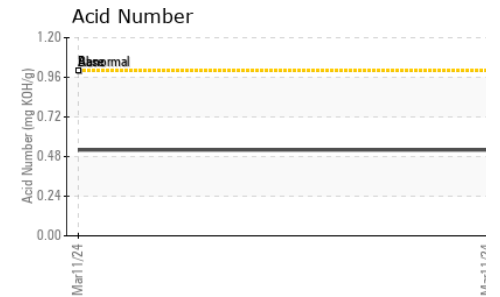
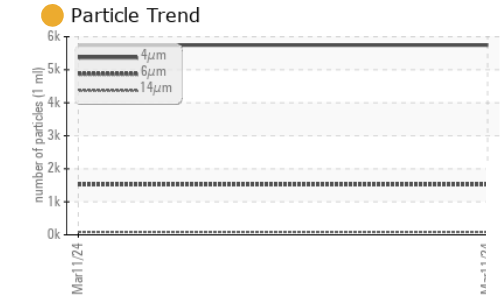
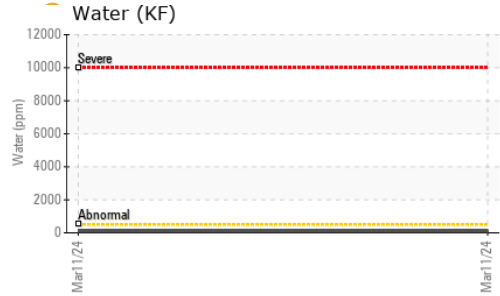
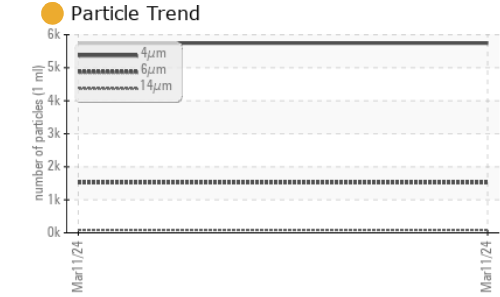
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	90	<b>17</b>	---	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	100	<b>8</b>	---	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m	0	<b>35</b>	---	---
Zinc	ppm	ASTM D5185m	0	<b>156</b>	---	---
Sulfur	ppm	ASTM D5185m	23500	<b>20647</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>2</b>	---	---
Sodium	ppm	ASTM D5185m		<b>8</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.011</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>111</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>5744</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>1520</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>86</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>21</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>0.52</b>	---	---

# OIL ANALYSIS REPORT



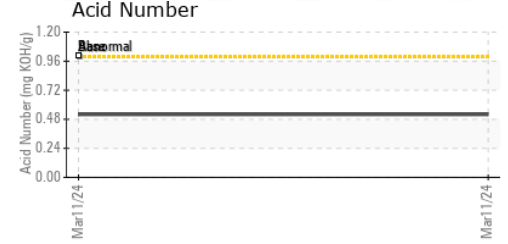
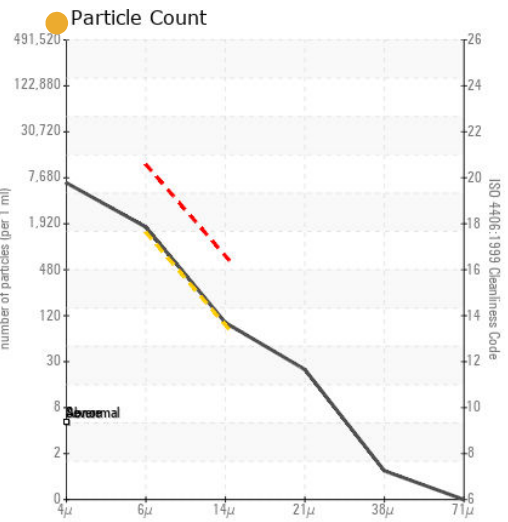
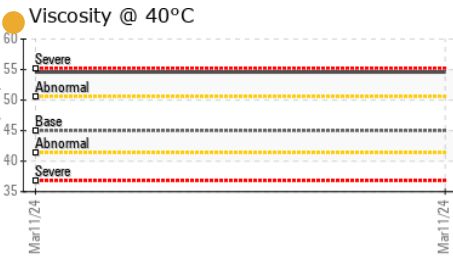
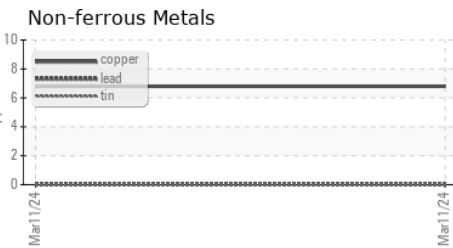
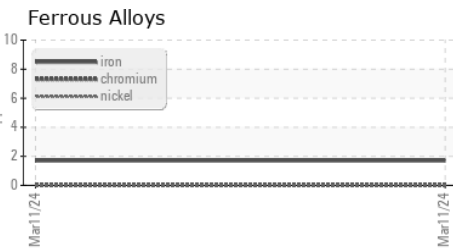
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	54.6	---

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.** : KCPA013319 **Received** : 27 Mar 2024  
**Lab Number** : 06130629 **Tested** : 28 Mar 2024  
**Unique Number** : 10950094 **Diagnosed** : 30 Mar 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ENCORE WELLHEAD SYSTEMS LLC**  
 5018 E HWY 62-82  
 LUBBOCK, TX  
 US 79403  
 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: