



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**8545453 (S/N 1384)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- QTS)**

## 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>KC130823</b>	---	---
Sample Date	Client Info			<b>06 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>4247</b>	---	---
Oil Age	hrs	Client Info		<b>2137</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>0</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>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>4</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

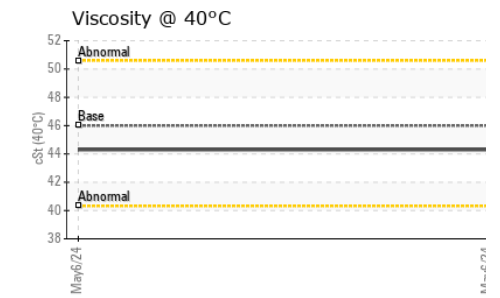
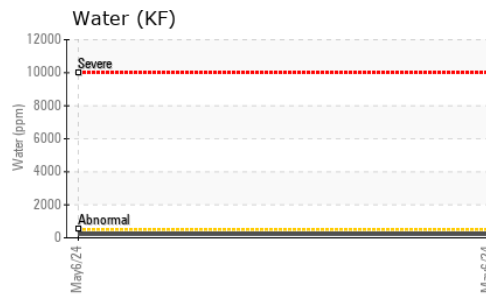
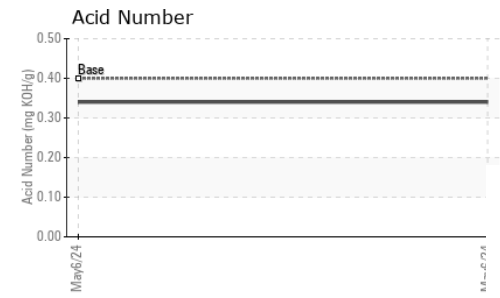
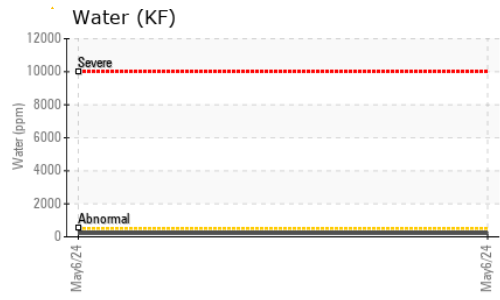
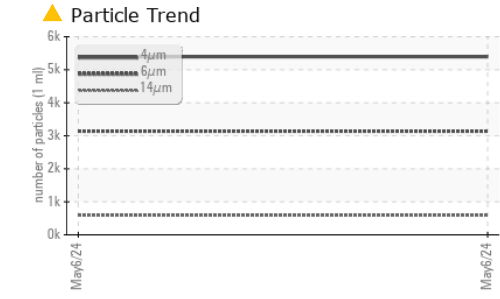
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m	90	<b>4</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	90	<b>54</b>	---	---
Calcium	ppm	ASTM D5185m	2	<b>4</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>6</b>	---	---
Zinc	ppm	ASTM D5185m		<b>6</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>9</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.022</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>220</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>5394</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 3139</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 586</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 121</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>▲ 20/19/16</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.34</b>	---	---

# OIL ANALYSIS REPORT



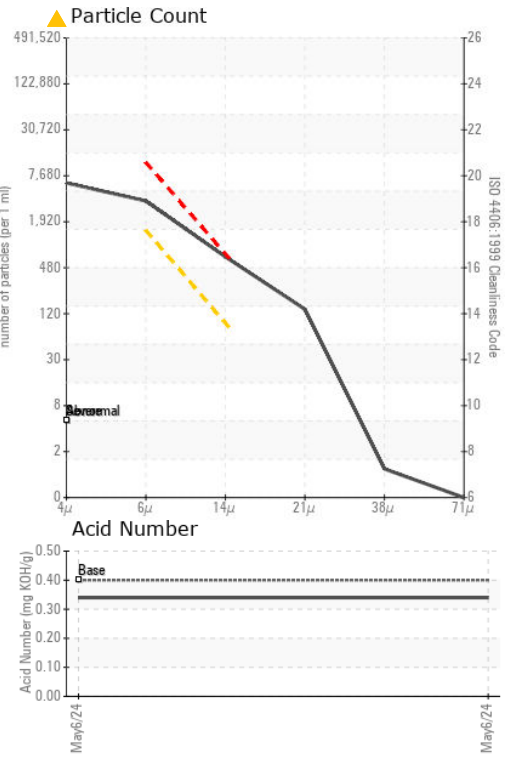
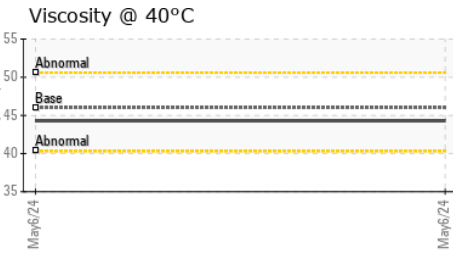
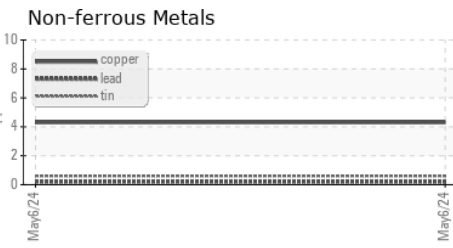
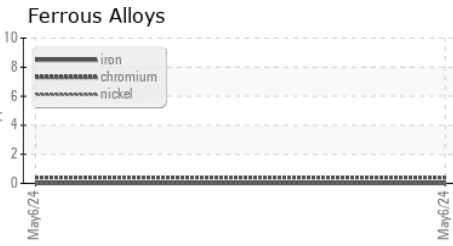
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 46	44.3	---	---

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.** : KC130823  
**Lab Number** : 06177716  
**Unique Number** : 11023769  
**Test Package** : IND 2  
**Received** : 13 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 15 May 2024 - Angela Borella

**TUFF SHOP**  
 9154 PORT UNION RIALTO RD, SUITE C  
 WEST CHESTER TWP, OH  
 US 45069  
 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)