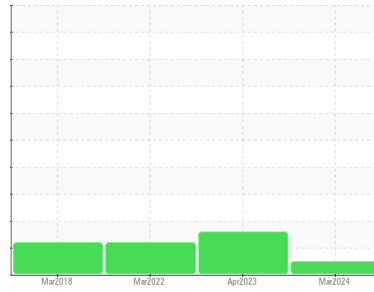




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER AS 20T 3005833 (S/N 1303)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>KCPA013900</b>	KCPA002763	KCP38524
Sample Date	Client Info			<b>21 Mar 2024</b>	05 Apr 2023	25 Mar 2022
Machine Age	hrs	Client Info		<b>85581</b>	80868	76898
Oil Age	hrs	Client Info		<b>3110</b>	0	12795
Oil Changed	Client Info			<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>15</b>	31	▲ 98
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

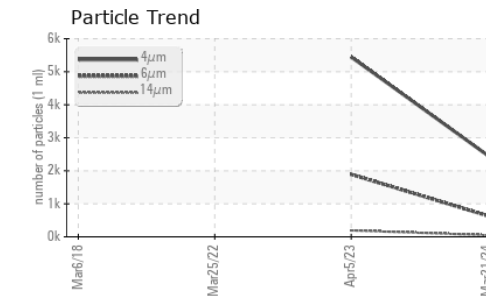
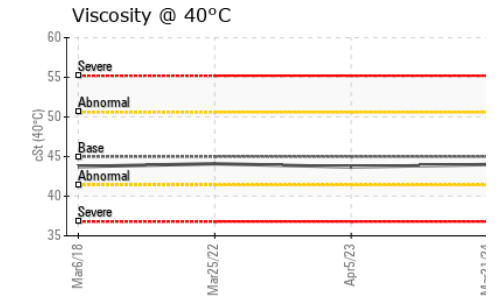
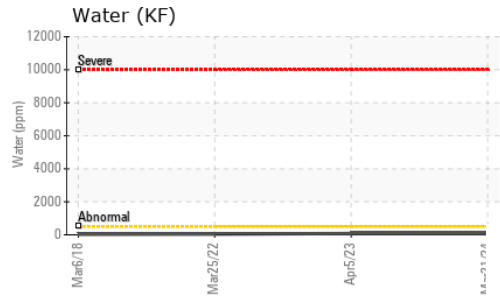
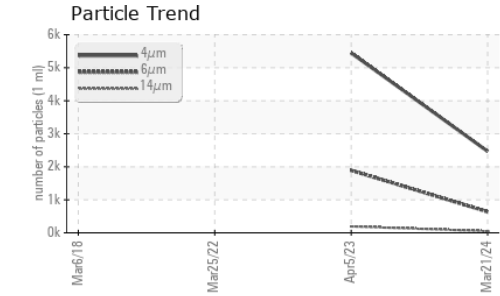
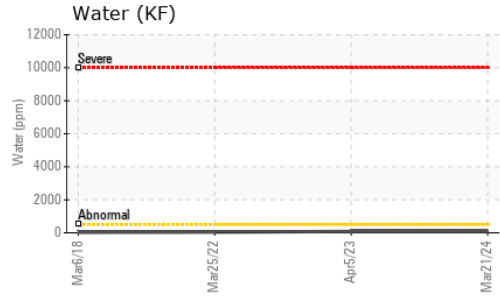
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	100	<b>&lt;1</b>	<1	3
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	2	0
Zinc	ppm	ASTM D5185m	0	<b>28</b>	2	0
Sulfur	ppm	ASTM D5185m	23500	<b>19986</b>	18286	10739

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water	%	ASTM D6304	>0.05	<b>0.008</b>	0.008	0.004
ppm Water	ppm	ASTM D6304	>500	<b>81</b>	82.1	43.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2467</b>	5445	---
Particles >6µm		ASTM D7647	>1300	<b>638</b>	● 1892	---
Particles >14µm		ASTM D7647	>80	<b>48</b>	▲ 193	---
Particles >21µm		ASTM D7647	>20	<b>13</b>	▲ 59	---
Particles >38µm		ASTM D7647	>4	<b>0</b>	4	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>18/16/13</b>	▲ 20/18/15	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.38</b>	0.33	0.34

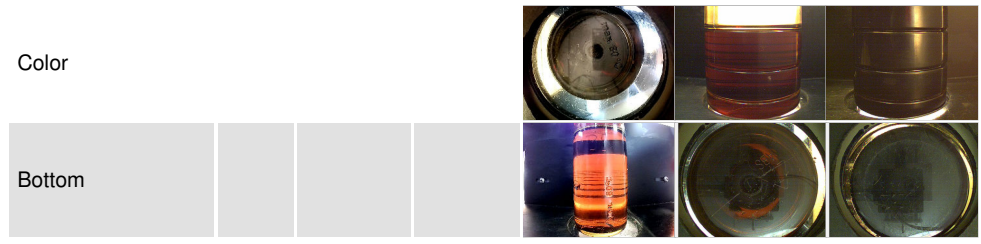
# OIL ANALYSIS REPORT



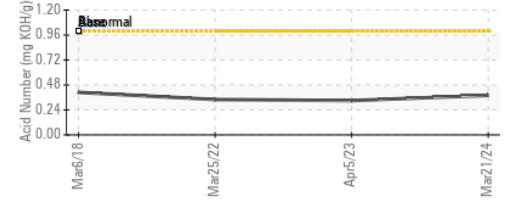
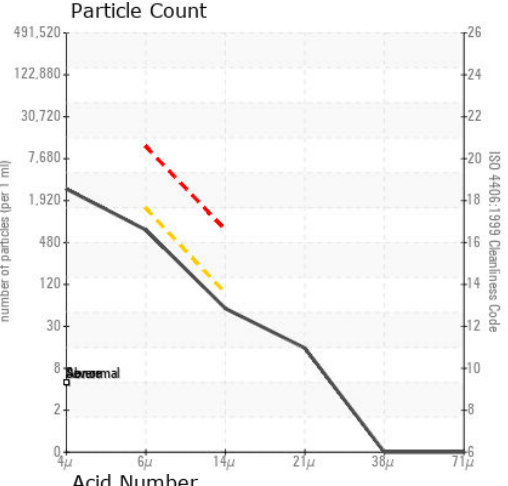
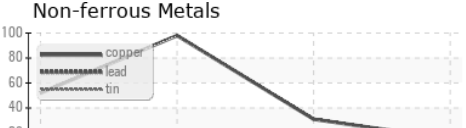
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	LIGHT	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45	44.0	43.7	44.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA013900  
**Lab Number** : 06143727  
**Unique Number** : 10968535  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 09 Apr 2024  
**Tested** : 10 Apr 2024  
**Diagnosed** : 12 Apr 2024 - Jonathan Hester

**CITY OF PORTSMOUTH - FILTRATION**  
 4862 GULLIA ST  
 NEW BOSTON, OH  
 US 45662  
 Contact: SERVICE MANAGER  
 WATERFILTRATION@PORTSMOUTH.OH.ORG

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)