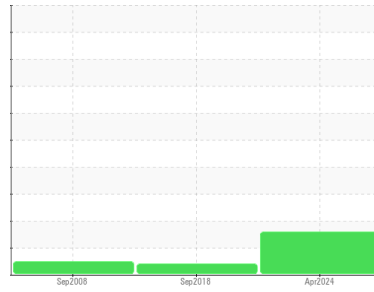




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**KAESER AS 20T 2592528 (S/N 1129)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### 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 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>KCPA016743</b>	KCP15141	KC007687
Sample Date	Client Info			<b>14 Apr 2024</b>	26 Sep 2018	19 Sep 2008
Machine Age	hrs	Client Info		<b>24783</b>	21400	4823
Oil Age	hrs	Client Info		<b>0</b>	3000	4823
Oil Changed	Client Info			<b>Changed</b>	Changed	Not Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
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>	<1	3
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	6
Copper	ppm	ASTM D5185m	>50	<b>6</b>	9	6
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	2
Antimony	ppm	ASTM D5185m		<b>---</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

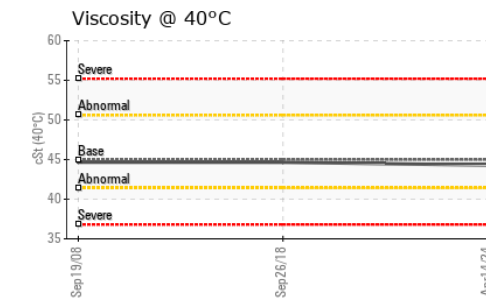
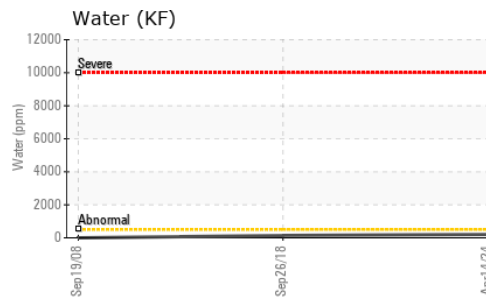
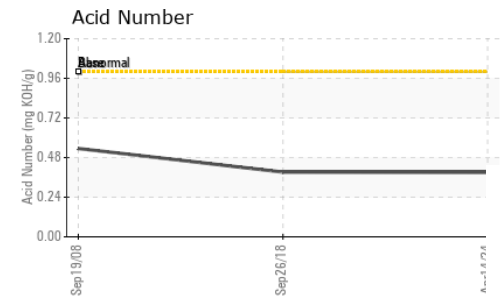
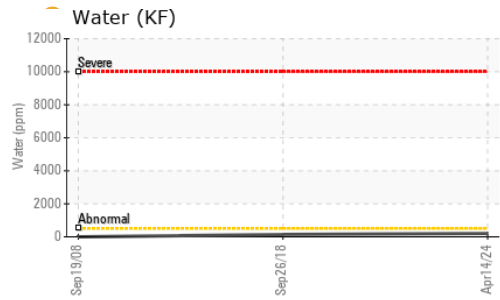
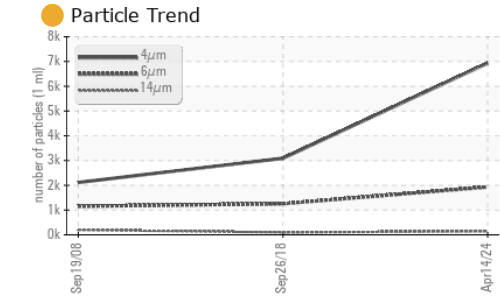
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	5
Magnesium	ppm	ASTM D5185m	100	<b>49</b>	24	58
Calcium	ppm	ASTM D5185m	0	<b>0</b>	<1	2
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	0	23
Zinc	ppm	ASTM D5185m	0	<b>10</b>	43	27
Sulfur	ppm	ASTM D5185m	23500	<b>23534</b>	18956	18816

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>14</b>	6	20
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	3
Water	%	ASTM D6304	>0.05	<b>0.021</b>	0.014	0.015
ppm Water	ppm	ASTM D6304	>500	<b>211</b>	140	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>6935</b>	3091	2115
Particles >6µm		ASTM D7647	>1300	<b>1930</b>	1255	1152
Particles >14µm		ASTM D7647	>80	<b>144</b>	95	196
Particles >21µm		ASTM D7647	>20	<b>43</b>	12	66
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	10
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>20/18/14</b>	17/14	17/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.39</b>	0.392	0.535

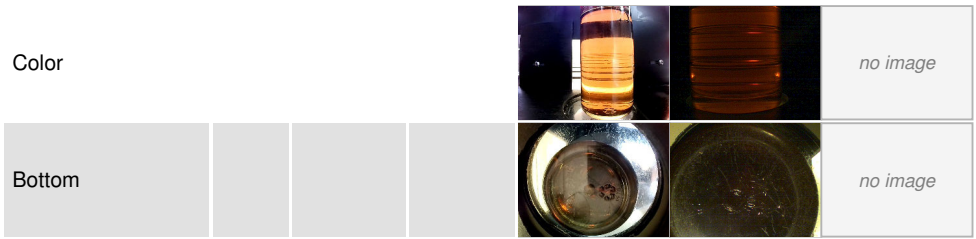
# OIL ANALYSIS REPORT



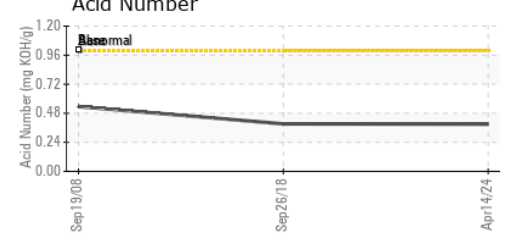
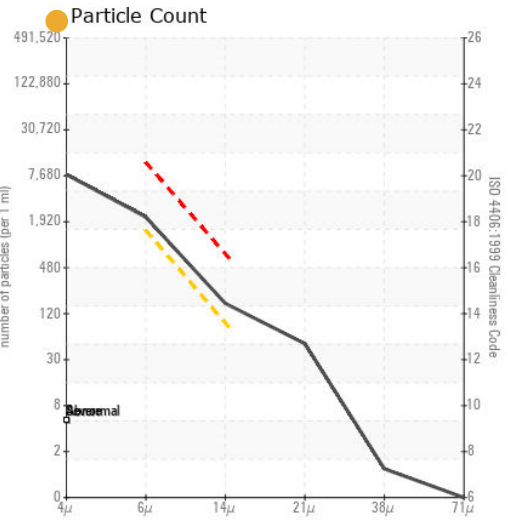
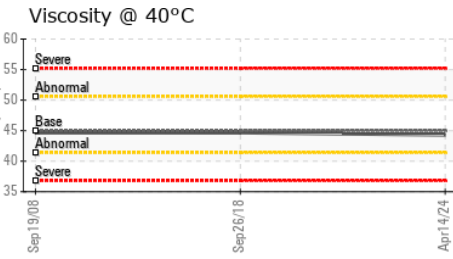
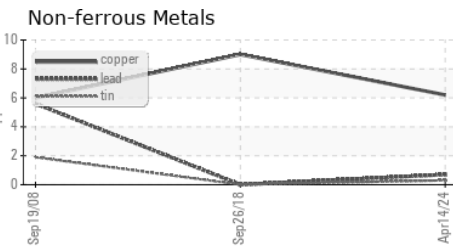
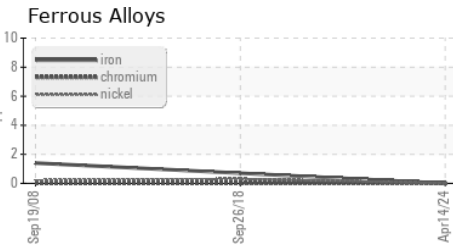
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.66	44.67

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016743  
**Lab Number** : 06154358  
**Unique Number** : 10989781  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 22 Apr 2024 - Doug Bogart

**HARTWIG**  
 5234 BEAR CREEK COURT  
 IRVING, TX  
 US 75061  
 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)