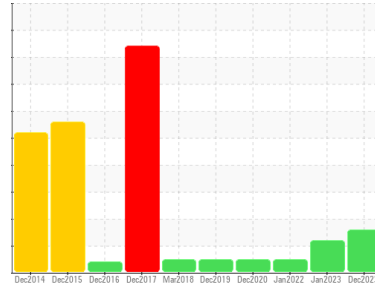


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SX7.5 4031315 (S/N 1162)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

No corrective action is recommended at this time. The 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 suitable for further service.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA010416</b>	KCP54663	KCP48596
Sample Date	Client Info	<b>29 Dec 2023</b>	10 Jan 2023	23 Jan 2022
Machine Age	hrs	<b>20136</b>	16788	13443
Oil Age	hrs	<b>0</b>	3345	4700
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>ABNORMAL</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>	0	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>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
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>	2	23
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>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 100	<b>55</b>	54	67
Calcium	ppm	ASTM D5185m 0	<b>3</b>	<1	0
Phosphorus	ppm	ASTM D5185m 0	<b>2</b>	29	3
Zinc	ppm	ASTM D5185m 0	<b>5</b>	10	8
Sulfur	ppm	ASTM D5185m 23500	<b>18618</b>	16835	18633

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>13</b>	12	14
Potassium	ppm	ASTM D5185m >20	<b>1</b>	2	0
Water	%	ASTM D6304 >0.05	<b>0.015</b>	0.016	0.017
ppm Water	ppm	ASTM D6304 >500	<b>153</b>	169.8	176.9

**FLUID CLEANLINESS**

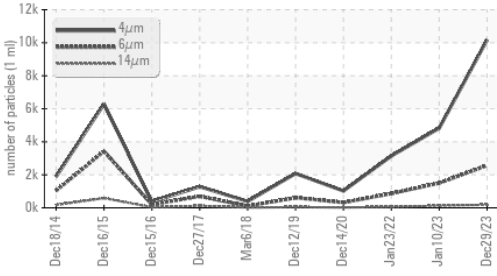
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>10168</b>	4823	3143
Particles >6µm	ASTM D7647 >1300	<b>▲ 2572</b>	▲ 1500	865
Particles >14µm	ASTM D7647 >80	<b>▲ 186</b>	▲ 123	54
Particles >21µm	ASTM D7647 >20	<b>▲ 47</b>	24	12
Particles >38µm	ASTM D7647 >4	<b>3</b>	3	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 21/19/15</b>	▲ 19/18/14	17/13

**FLUID DEGRADATION**

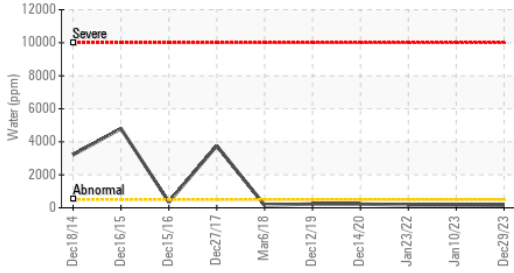
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.37</b>	0.33	0.33

# OIL ANALYSIS REPORT

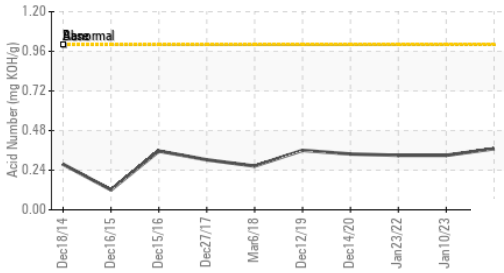
### ▲ Particle Trend



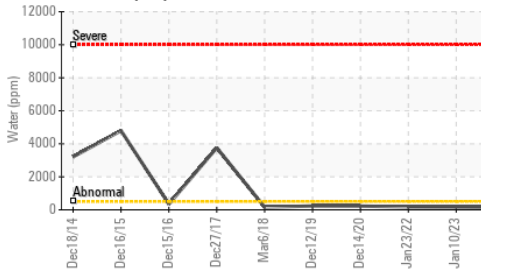
### Water (KF)



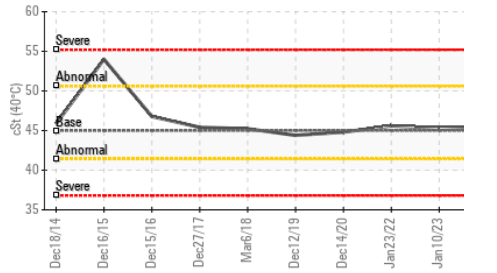
### Acid Number



### Water (KF)



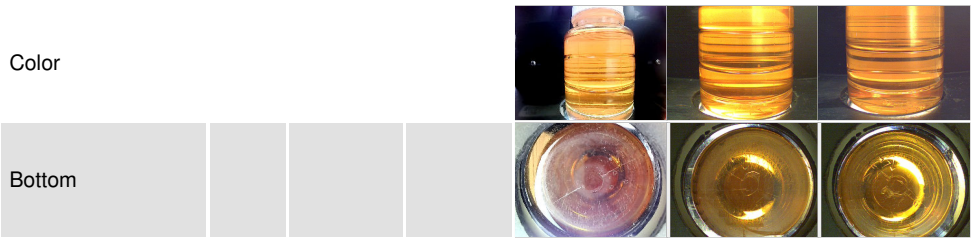
### Viscosity @ 40°C



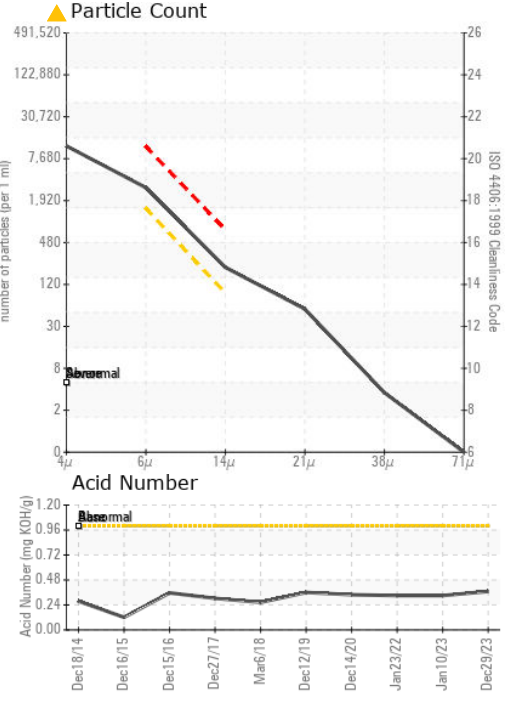
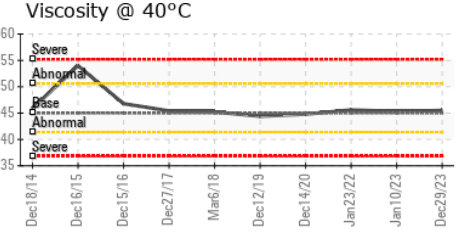
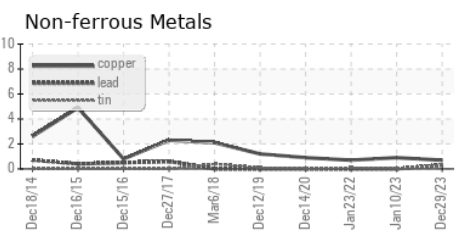
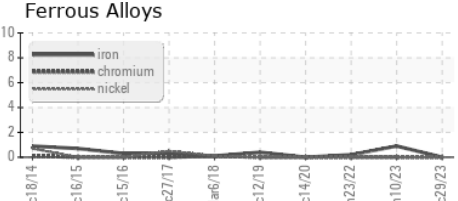
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.5	45.3	45.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010416 **Recieved** : 18 Jan 2024  
**Lab Number** : 06064354 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835736 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CONTROL SOUTHERN**  
 3850 LAKEFIELD CT  
 SUWANEE, GA  
 US 30024  
 Contact: DOUG MILLWOOD  
 DOUG.MILLWOOD@CONTROLSOUTHERN.COM  
 T:  
 F:

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)