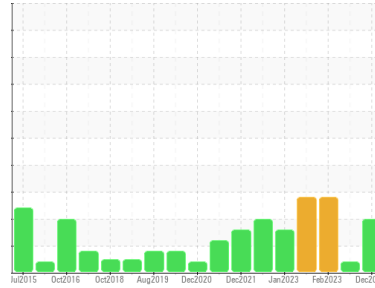




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**KAESER SFC 30S 4964644 (S/N 1004)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**

**DIAGNOSIS**

**Recommendation**

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**

The aluminum level is abnormal. All other 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>KC111922</b>	KC101898	KC97193
Sample Date	Client Info	<b>28 Dec 2023</b>	23 Jun 2023	21 Feb 2023
Machine Age	hrs	<b>72236</b>	67770	64203
Oil Age	hrs	<b>13000</b>	3309	0
Oil Changed	Client Info	<b>Changed</b>	Changed	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>15</b>	<1	6
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>▲ 21</b>	4	<b>▲ 59</b>
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>8</b>	3	3
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

**ADDITIVES**

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	7
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m 500	<b>364</b>	49	535
Zinc	ppm	ASTM D5185m	<b>238</b>	21	114

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Water	%	ASTM D6304 >0.05	<b>0.006</b>	0.003	0.012
ppm Water	ppm	ASTM D6304 >500	<b>68</b>	28.1	122.7

**FLUID CLEANLINESS**

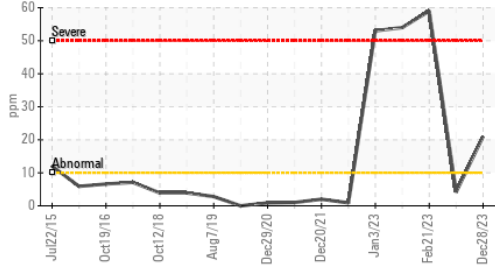
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>11859</b>	---	21342
Particles >6µm	ASTM D7647 >1300	<b>▲ 2104</b>	---	<b>▲ 8420</b>
Particles >14µm	ASTM D7647 >80	<b>▲ 82</b>	---	<b>▲ 885</b>
Particles >21µm	ASTM D7647 >20	<b>19</b>	---	<b>▲ 194</b>
Particles >38µm	ASTM D7647 >4	<b>0</b>	---	<b>▲ 4</b>
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 21/18/14</b>	---	<b>▲ 22/20/17</b>

**FLUID DEGRADATION**

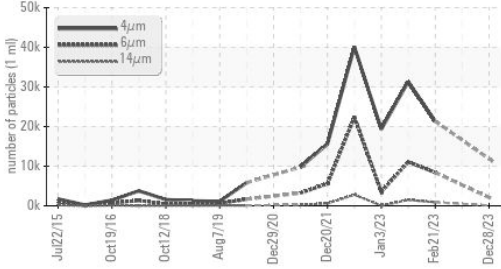
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	<b>0.73</b>	0.26	1.57

# OIL ANALYSIS REPORT

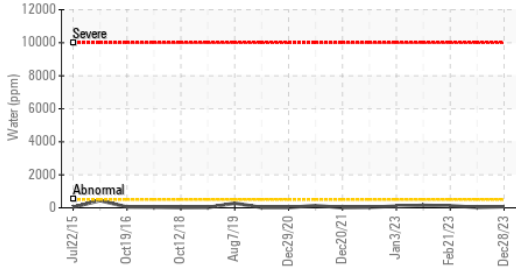
## ▲ Aluminum (ppm)



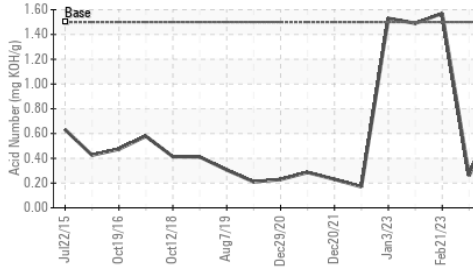
## ▲ Particle Trend



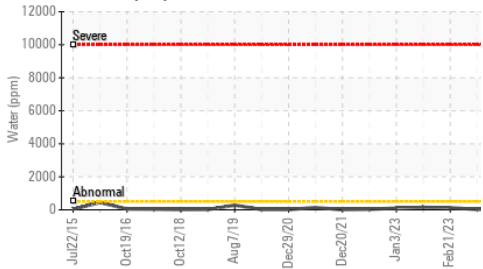
## Water (KF)



## Acid Number



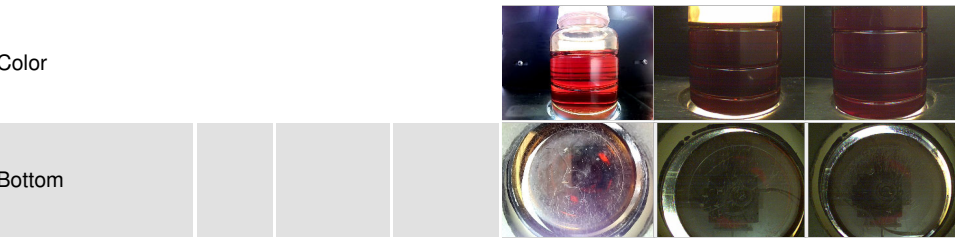
## Water (KF)



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	▲ 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

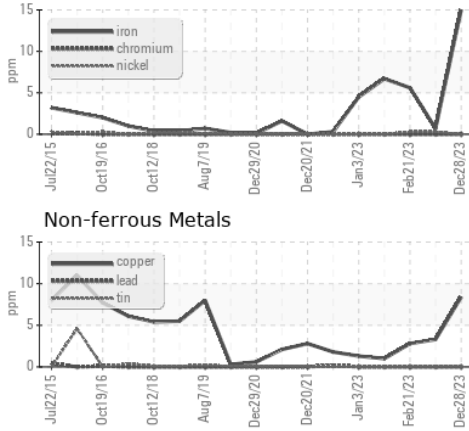
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.2	46.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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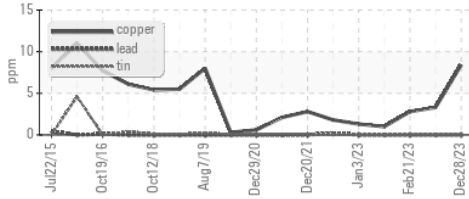


## GRAPHS

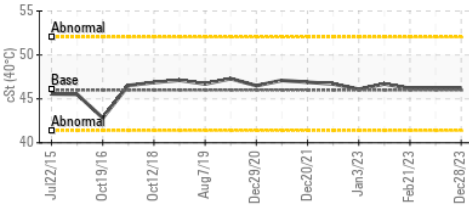
### Ferrous Alloys



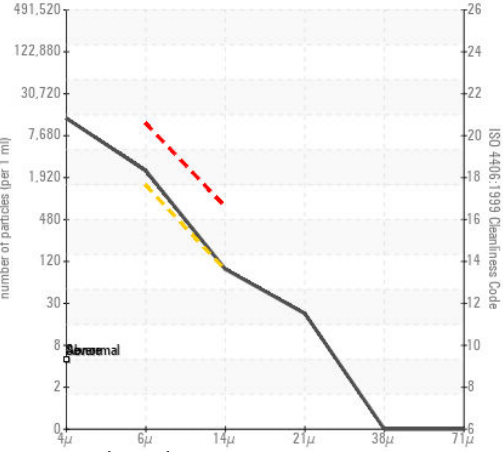
### Non-ferrous Metals



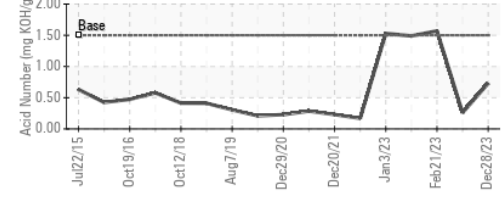
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC111922 **Recieved** : 19 Jan 2024  
**Lab Number** : 06065610 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10836992 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**STAR KAY WHITE**  
 85 BRENNER DR  
 CONGERS, NY  
 US 10920  
 Contact:

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: