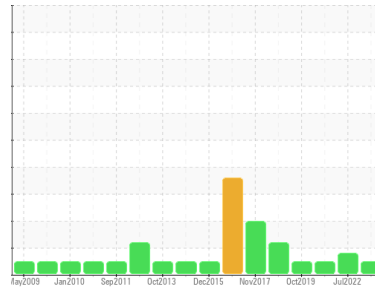


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER SFC22 3274451 (S/N 1092)**

Component  
**Compressor**

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

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCPA002401</b>	KCP49746	KC88912
Sample Date	Client Info	<b>14 Jul 2023</b>	29 Jul 2022	03 Oct 2020
Machine Age	hrs	<b>102505</b>	96475	87706
Oil Age	hrs	<b>8382</b>	7497	8199
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	ATTENTION	NORMAL

### WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>6</b>	4	4
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	0
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	<b>0</b>	2	1
Barium	ppm	ASTM D5185m 90	<b>0</b>	27	56
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>7</b>	26	62
Calcium	ppm	ASTM D5185m 2	<b>0</b>	<1	3
Phosphorus	ppm	ASTM D5185m	<b>0</b>	1	2
Zinc	ppm	ASTM D5185m	<b>2</b>	5	2
Sulfur	ppm	ASTM D5185m	<b>18582</b>	18954	16889

### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>5</b>	16	42
Potassium	ppm	ASTM D5185m >20	<b>1</b>	5	11
Water	%	ASTM D6304 >0.05	<b>0.007</b>	0.017	0.019
ppm Water	ppm	ASTM D6304 >500	<b>71.4</b>	170.4	194.1

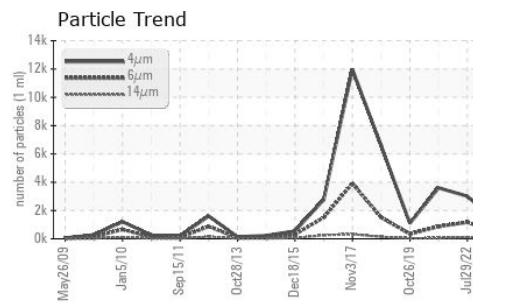
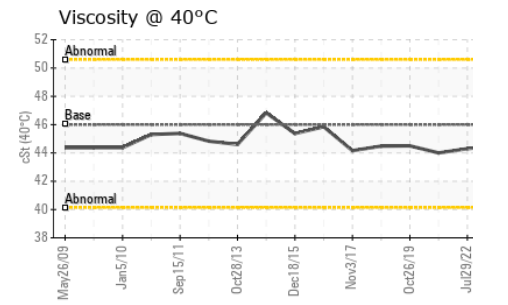
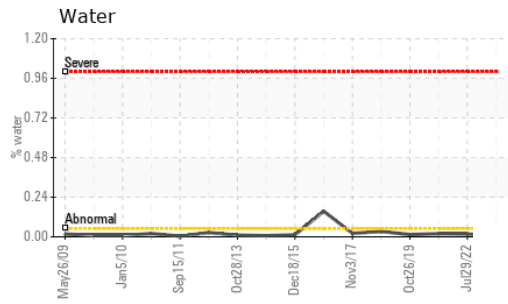
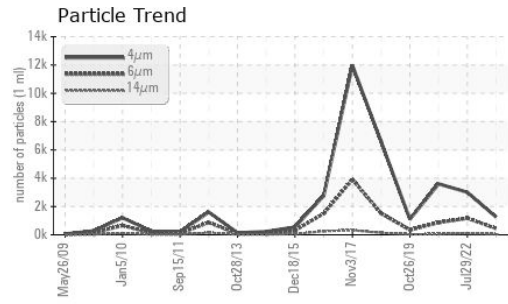
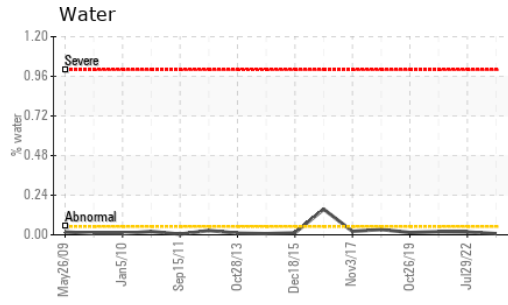
### FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>1259</b>	3004	3601
Particles >6µm	ASTM D7647 >1300	<b>439</b>	1173	867
Particles >14µm	ASTM D7647 >80	<b>41</b>	▲ 109	46
Particles >21µm	ASTM D7647 >20	<b>9</b>	14	11
Particles >38µm	ASTM D7647 >4	<b>1</b>	2	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>17/16/13</b>	▲ 19/17/14	17/13

### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.40</b>	0.37	0.391

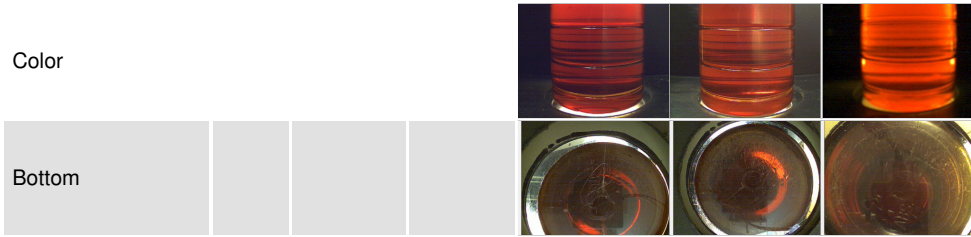
# OIL ANALYSIS REPORT



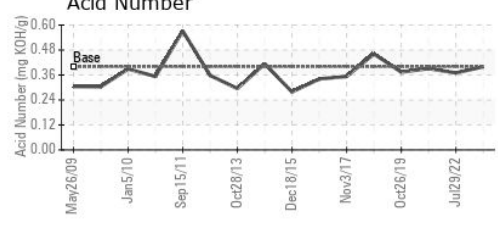
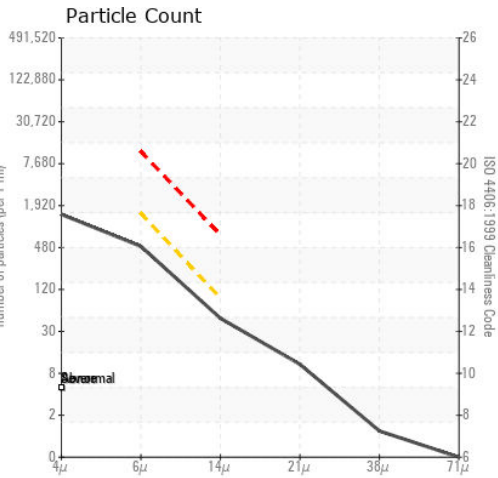
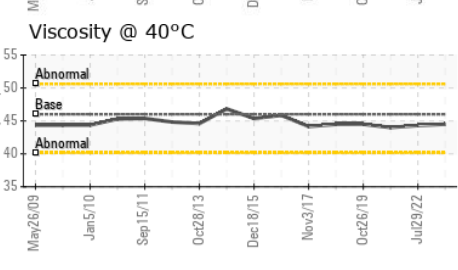
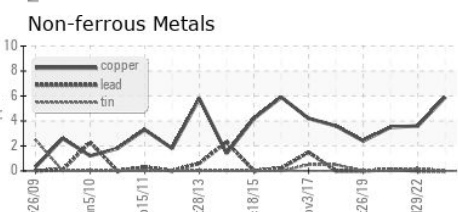
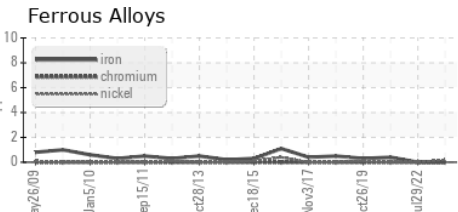
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.5	44.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA002401 **Received** : 21 Jul 2023  
**Lab Number** : 05904928 **Diagnosed** : 25 Jul 2023  
**Unique Number** : 10566284 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**KLH INDUSTRIES, INC.**  
 N117 W18607 FULTON DRIVE  
 GERMANTOWN, WI  
 US 53022  
 Contact: SERVICE MANAGER  
 aandrae@klhindustries.com

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)