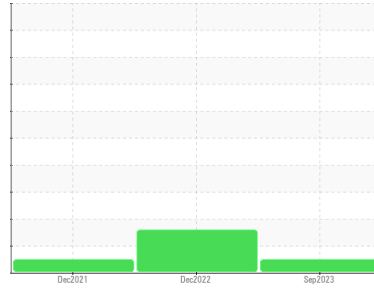




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**6934742 (S/N 1163)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**

## 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>KCPA003872</b>	KCP52042	KCP43250
Sample Date	Client Info			<b>18 Sep 2023</b>	12 Dec 2022	09 Dec 2021
Machine Age	hrs Client Info			<b>16709</b>	14677	10395
Oil Age	hrs Client Info			<b>0</b>	10000	4000
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>13</b>	8	3
Chromium	ppm	ASTM D5185m	>10	<b>0</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>5</b>	8	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>3</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<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

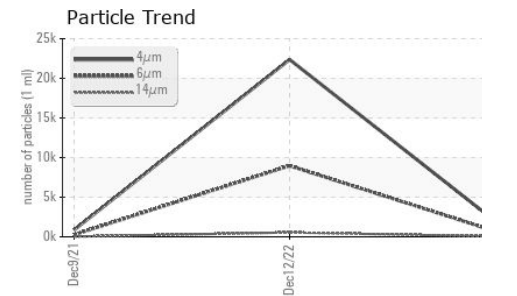
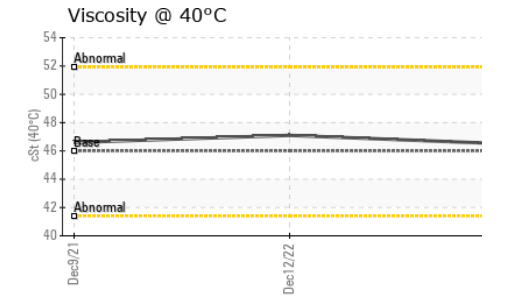
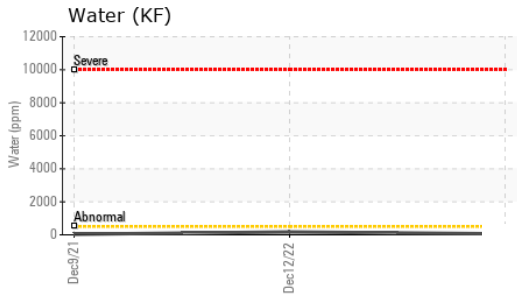
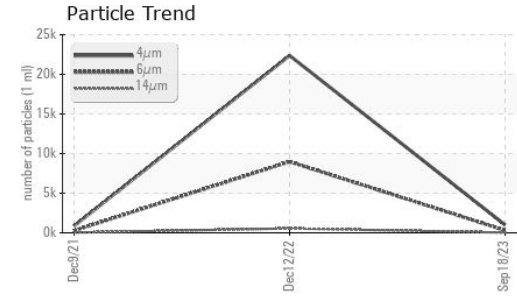
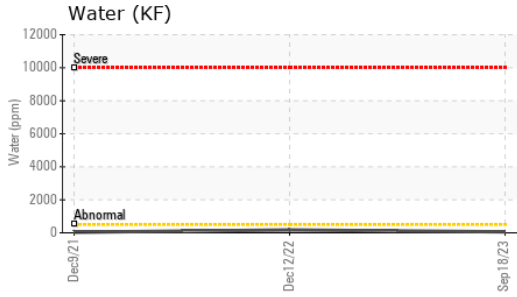
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	0	0
Calcium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	500	<b>460</b>	516	346
Zinc	ppm	ASTM D5185m		<b>516</b>	613	419
Sulfur	ppm	ASTM D5185m		<b>2016</b>	1932	1365

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>8</b>	7	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>0.005</b>	0.017	0.003
ppm Water	ppm	ASTM D6304	>500	<b>58.4</b>	174.0	34.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>993</b>	22370	869
Particles >6µm		ASTM D7647	>1300	<b>301</b>	▲ 8970	263
Particles >14µm		ASTM D7647	>80	<b>20</b>	▲ 551	25
Particles >21µm		ASTM D7647	>20	<b>7</b>	▲ 66	4
Particles >38µm		ASTM D7647	>4	<b>1</b>	3	0
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>17/15/11</b>	▲ 20/16	15/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	<b>0.98</b>	0.97	0.570

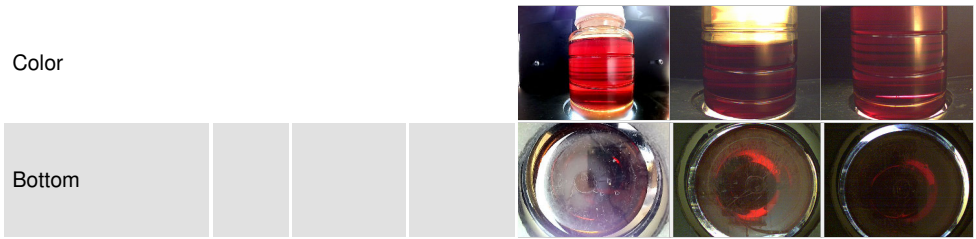
# OIL ANALYSIS REPORT



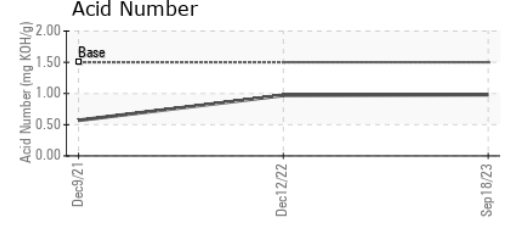
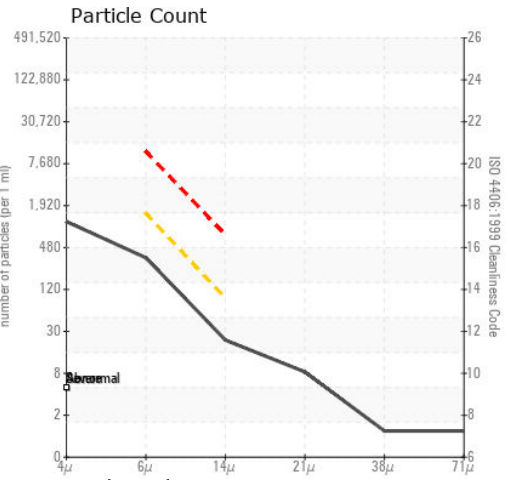
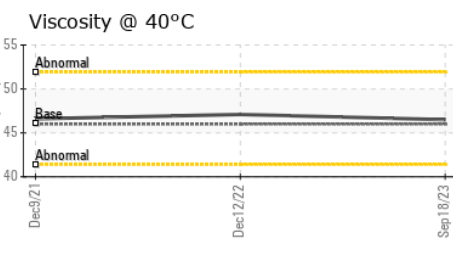
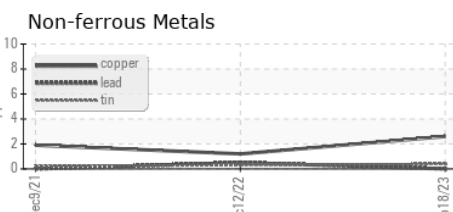
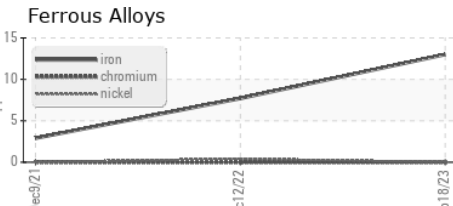
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46.5	47.1	46.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA003872 **Received** : 25 Sep 2023  
**Lab Number** : 05960609 **Diagnosed** : 27 Sep 2023  
**Unique Number** : 10661822 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SEMI FREDDIS BAKERS**  
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 ALAMEDA, CA  
 US 94502  
 Contact: Z GONZALES  
 ZGONZALES@SEMIFREDDIS.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)