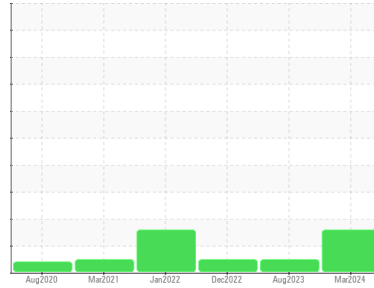




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**7239207 (S/N 1010)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) FG-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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>KC128653</b>	KC110649	KC107661
Sample Date	Client Info			<b>14 Mar 2024</b>	19 Aug 2023	28 Dec 2022
Machine Age	hrs	Client Info		<b>26669</b>	21744	16451
Oil Age	hrs	Client Info		<b>0</b>	5293	5400
Oil Changed	Client Info			<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	2	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>14</b>	17	21
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

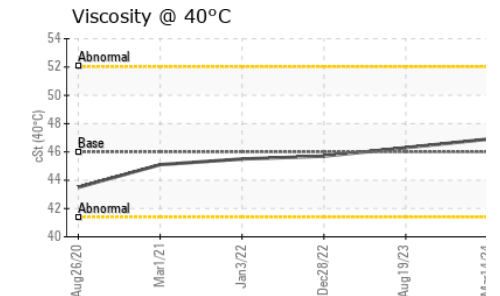
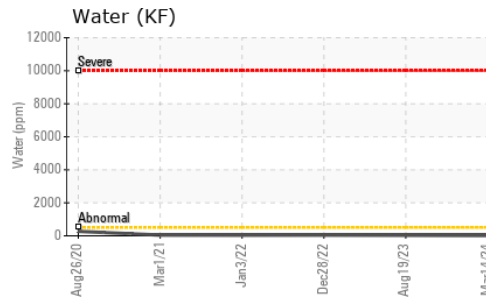
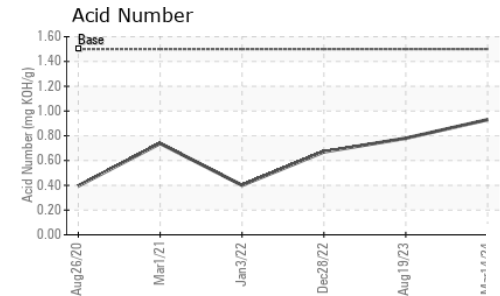
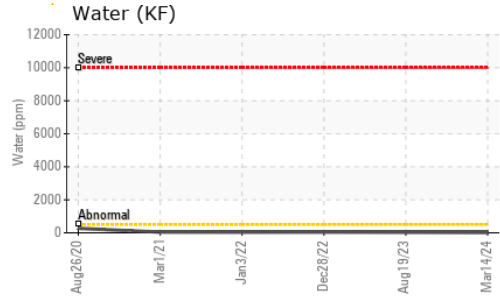
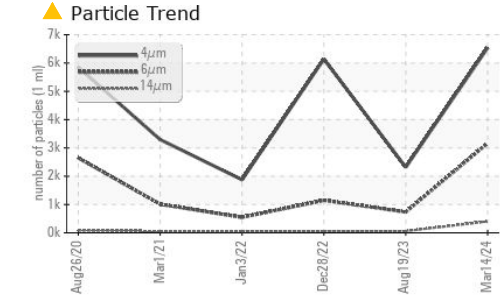
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	500	<b>332</b>	302	238
Zinc	ppm	ASTM D5185m		<b>400</b>	343	348

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water	%	ASTM D6304	>0.05	<b>0.001</b>	0.003	0.004
ppm Water	ppm	ASTM D6304	>500	<b>4</b>	26.4	40.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>6536</b>	2317	6140
Particles >6µm		ASTM D7647	>1300	<b>▲ 3163</b>	732	1148
Particles >14µm		ASTM D7647	>80	<b>▲ 402</b>	60	61
Particles >21µm		ASTM D7647	>20	<b>▲ 83</b>	11	12
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 20/19/16</b>	18/17/13	20/17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	<b>0.93</b>	0.78	0.67

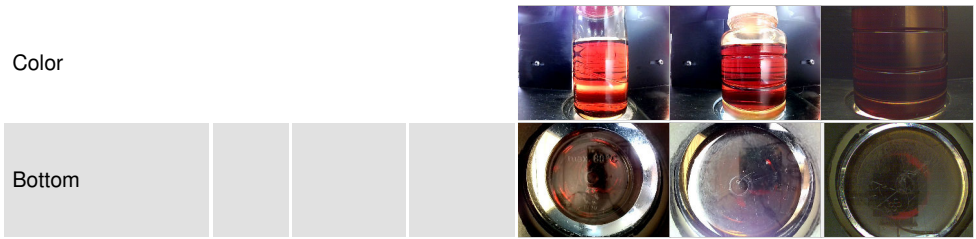
# OIL ANALYSIS REPORT



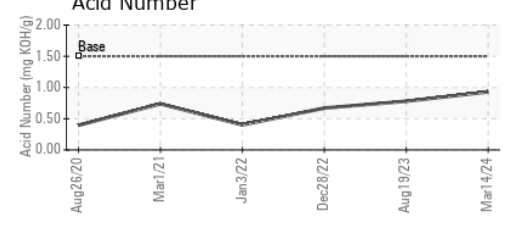
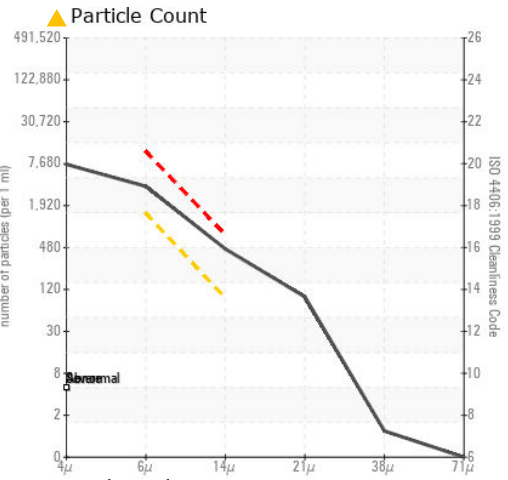
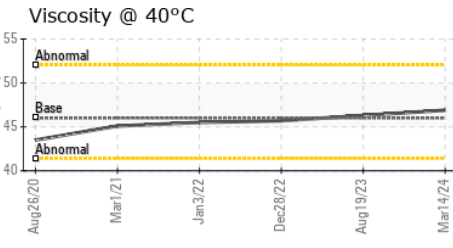
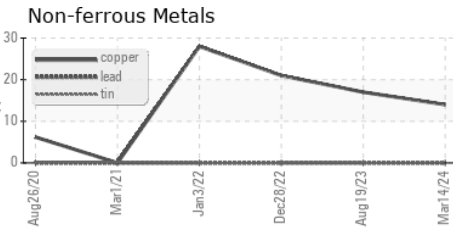
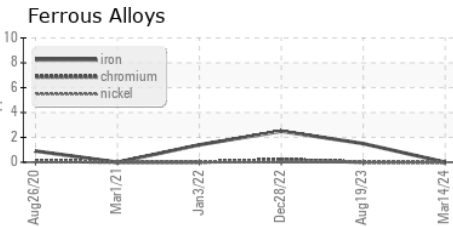
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46.9	46.3	45.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC128653  
**Lab Number** : 06122382  
**Unique Number** : 10936533  
**Test Package** : IND 2  
**Received** : 19 Mar 2024  
**Tested** : 20 Mar 2024  
**Diagnosed** : 21 Mar 2024 - Jonathan Hester

**PIERRES ICE CREAM**  
 6200 EUCLID AVE  
 CLEVELAND, OH  
 US 44103  
 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)