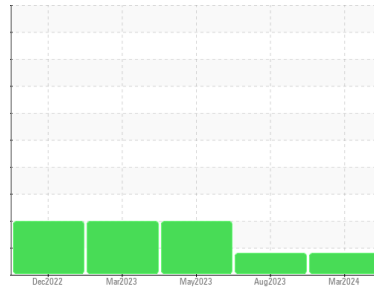




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id

**KAESER 8237636**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) FG-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

The aluminum level is abnormal. All other 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>KC109698</b>	KC125755	KC108260
Sample Date	Client Info	<b>26 Mar 2024</b>	21 Aug 2023	19 May 2023
Machine Age	hrs	<b>6078</b>	4318	3579
Oil Age	hrs	<b>1760</b>	0	923
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>3</b>	3	3
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>▲ 17</b>	▲ 23	▲ 34
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>4</b>	4	4
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</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>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 500	<b>261</b>	434	● 505
Zinc	ppm	ASTM D5185m	<b>140</b>	241	● 291

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>2</b>	8	9
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	1
Water	%	ASTM D6304 >0.05	<b>0.002</b>	0.006	0.005
ppm Water	ppm	ASTM D6304 >500	<b>21</b>	64.3	58.1

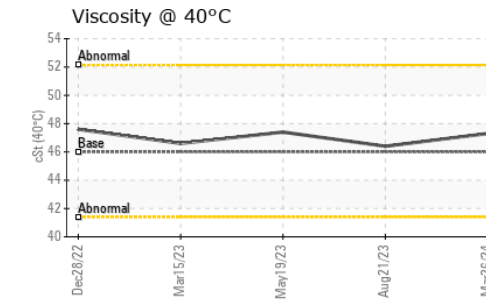
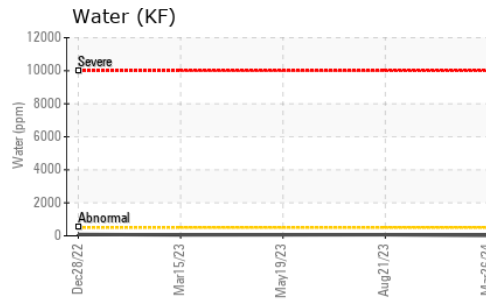
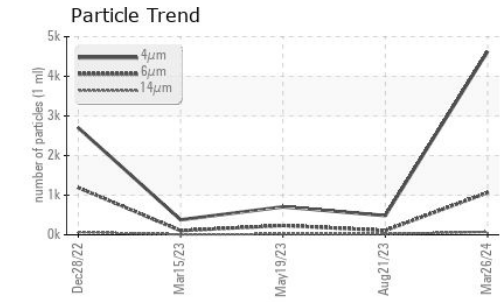
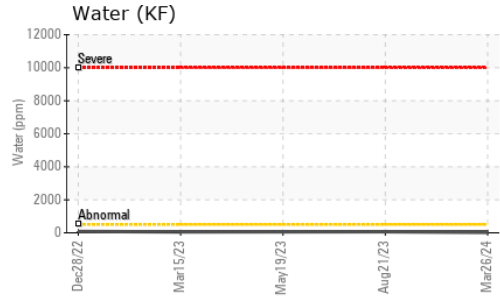
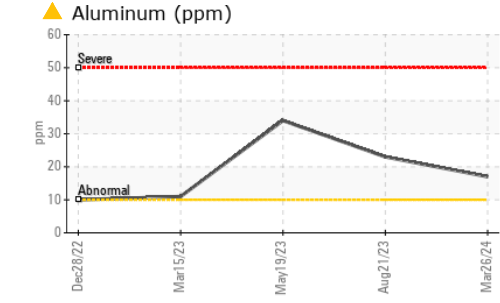
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>4630</b>	485	706
Particles >6µm	ASTM D7647 >1300	<b>1065</b>	109	235
Particles >14µm	ASTM D7647 >80	<b>75</b>	18	17
Particles >21µm	ASTM D7647 >20	<b>19</b>	6	3
Particles >38µm	ASTM D7647 >4	<b>1</b>	3	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	3	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>19/17/13</b>	16/14/11	17/15/11

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	<b>0.66</b>	0.88	1.15

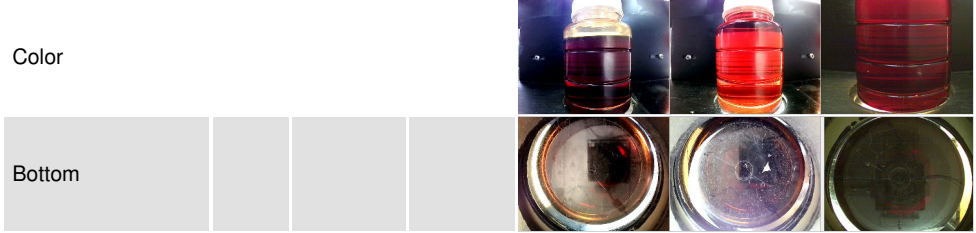
# OIL ANALYSIS REPORT



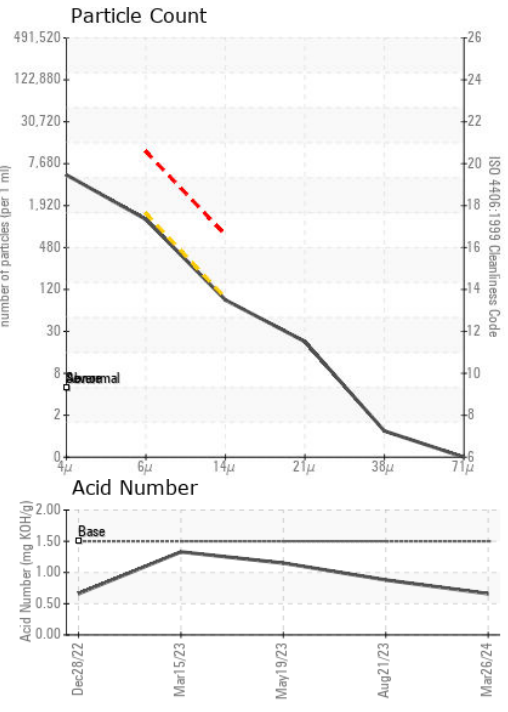
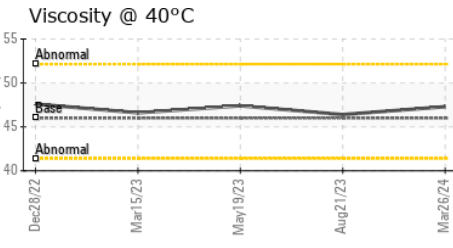
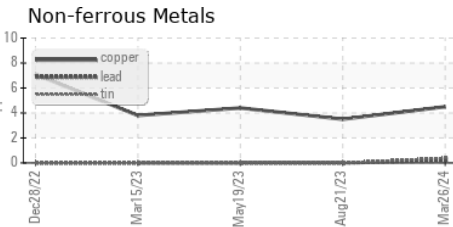
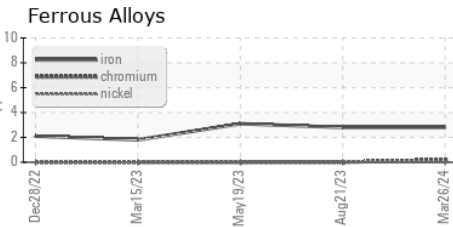
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.3	46.4	47.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC109698  
**Lab Number** : 06155199  
**Unique Number** : 10990622  
**Test Package** : IND 2  
**Received** : 19 Apr 2024  
**Tested** : 24 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Jonathan Hester

**CIRKUL INC**  
 4456 EAGLE FALLS PL  
 TAMPA, FL  
 US 33619  
 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)