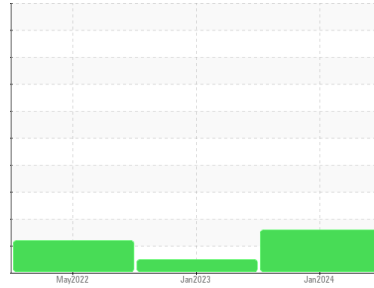




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**7163703**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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>KCPA008749</b>	KCP54319	KCP45144
Sample Date	Client Info		<b>03 Jan 2024</b>	16 Jan 2023	24 May 2022
Machine Age	hrs	Client Info	<b>38869</b>	26243	20766
Oil Age	hrs	Client Info	<b>0</b>	2000	3950
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	2
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	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>3</b>	3	6
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>2</b>	8	12
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	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	<1
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>0</b>	<1	1
Calcium	ppm	ASTM D5185m	<b>0</b>	0	5
Phosphorus	ppm	ASTM D5185m 500	<b>60</b>	131	341
Zinc	ppm	ASTM D5185m	<b>0</b>	77	141
Sulfur	ppm	ASTM D5185m	<b>1118</b>	564	1411

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304 >0.05	<b>0.005</b>	0.002	0.002
ppm Water	ppm	ASTM D6304 >500	<b>51</b>	21.4	16.9

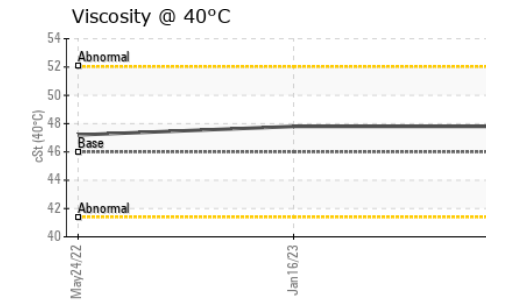
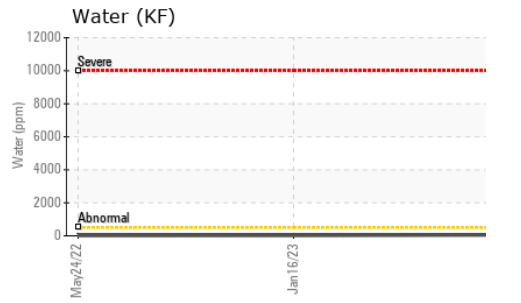
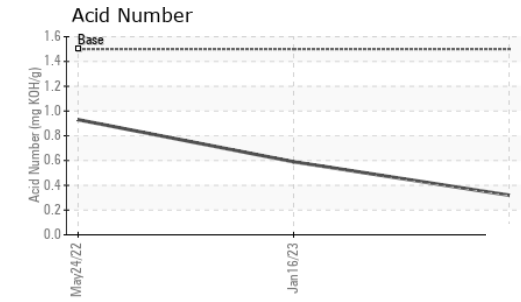
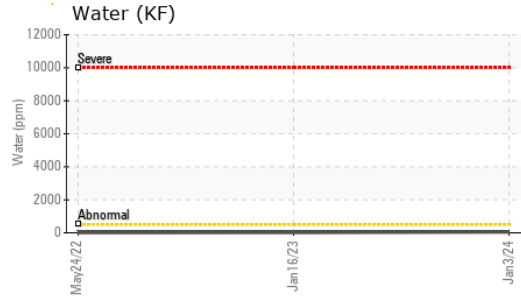
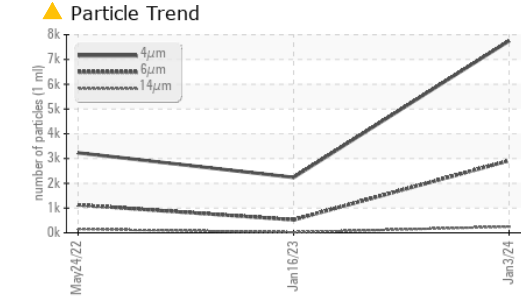
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>7753</b>	2236	3230
Particles >6µm	ASTM D7647 >1300		<b>▲ 2917</b>	526	1127
Particles >14µm	ASTM D7647 >80		<b>▲ 248</b>	21	▲ 149
Particles >21µm	ASTM D7647 >20		<b>▲ 42</b>	2	▲ 44
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>▲ 19/15</b>	16/12	▲ 17/14

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	<b>0.32</b>	0.59	0.93

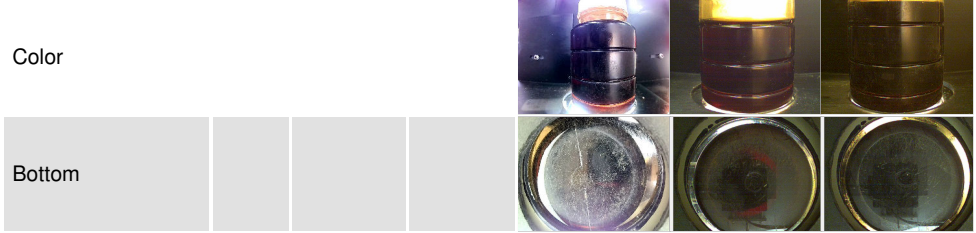
# OIL ANALYSIS REPORT



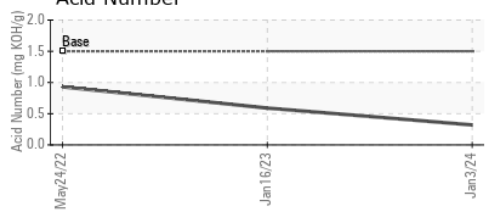
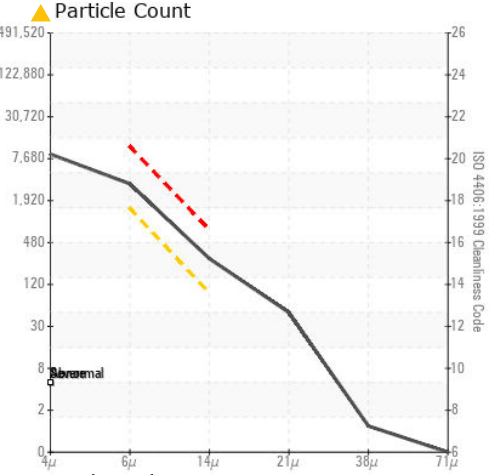
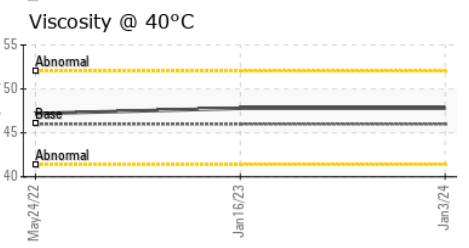
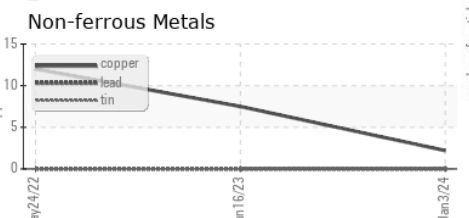
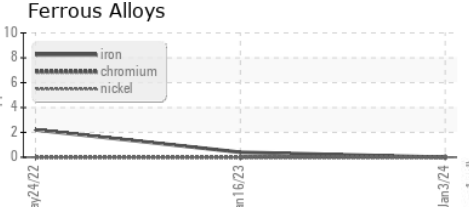
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.8	47.8	47.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA008749 **Received** : 10 Jan 2024  
**Lab Number** : 06056712 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10822661 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**Ardent Mills-Commerce City**  
 4545 E 64TH AVE  
 COMMERCE CITY, CO  
 US 80022  
 Contact: Ben Waldron  
 ben.waldron@ardentmills.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)