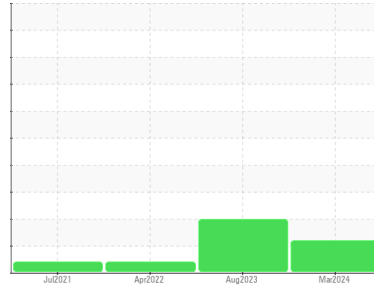




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**1914229 (S/N 1217)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-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 moderate 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>KCPA014962</b>	KCPA004930	KCP45248
Sample Date	Client Info			<b>12 Mar 2024</b>	14 Aug 2023	07 Apr 2022
Machine Age	hrs	Client Info		<b>90593</b>	88047	82138
Oil Age	hrs	Client Info		<b>0</b>	0	3000
Oil Changed	Client Info			<b>Not Changed</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
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>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	7
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

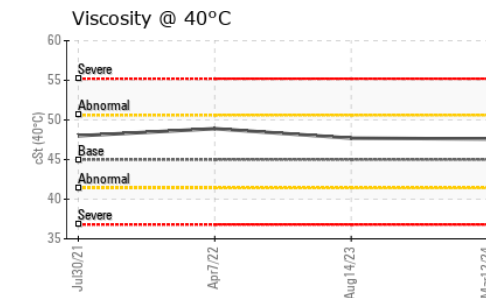
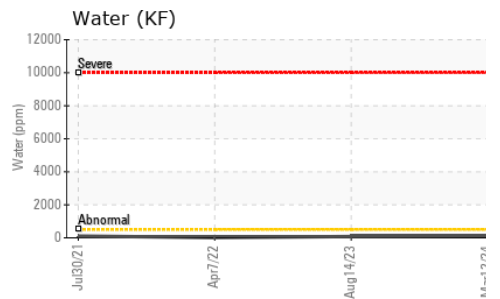
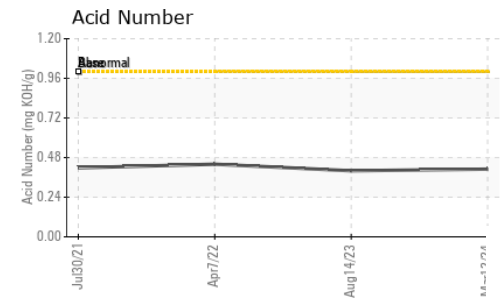
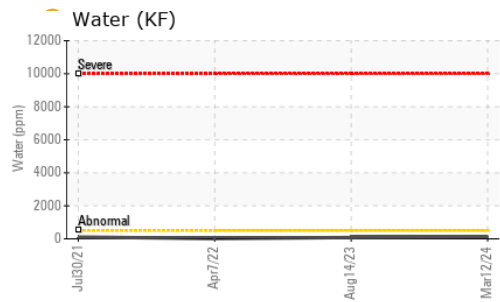
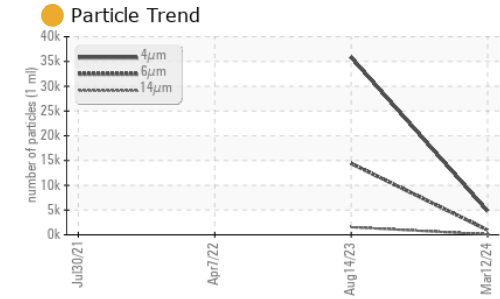
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	100	<b>39</b>	4	2
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	1	5
Zinc	ppm	ASTM D5185m	0	<b>26</b>	28	4
Sulfur	ppm	ASTM D5185m	23500	<b>24535</b>	23306	16377

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	2
Sodium	ppm	ASTM D5185m		<b>11</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.013</b>	0.008	0.001
ppm Water	ppm	ASTM D6304	>500	<b>136</b>	80.5	11.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>4794</b>	35871	---
Particles >6µm		ASTM D7647	>1300	<b>955</b>	▲ 14416	---
Particles >14µm		ASTM D7647	>80	● <b>92</b>	▲ 1542	---
Particles >21µm		ASTM D7647	>20	● <b>31</b>	▲ 325	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	● 7	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● <b>19/17/14</b>	▲ 22/21/18	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.40	0.44

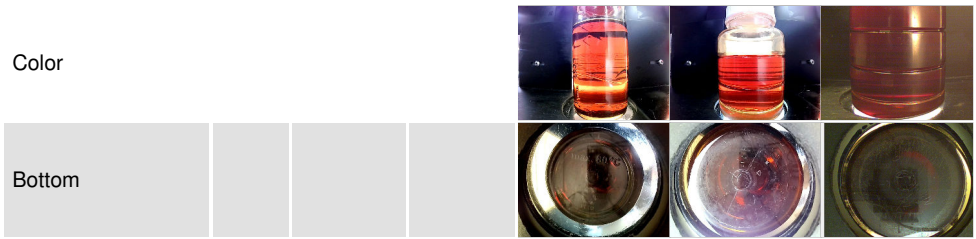
# OIL ANALYSIS REPORT



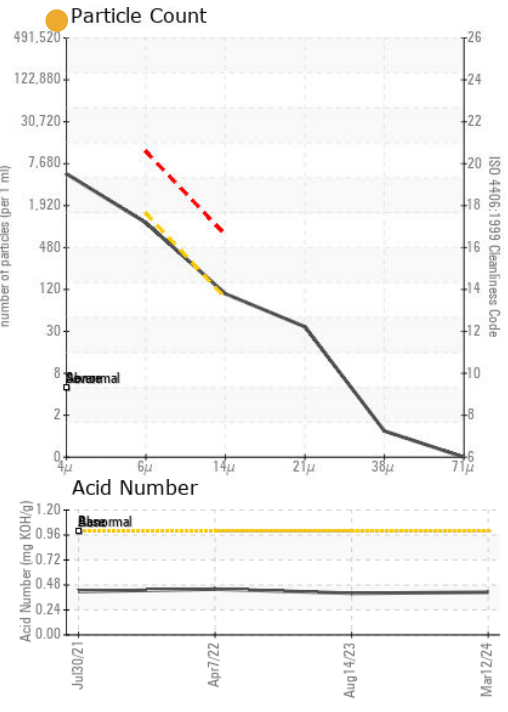
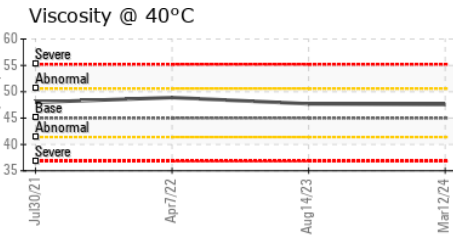
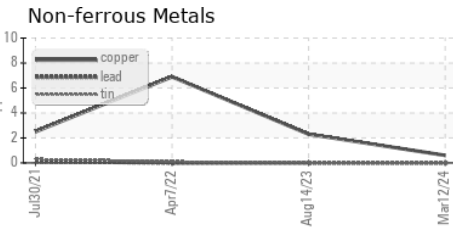
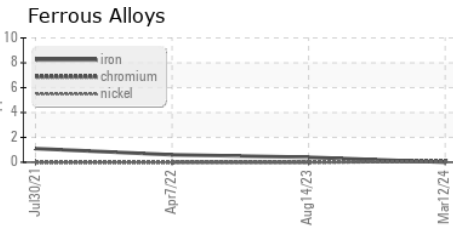
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	LIGHT	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	47.6	47.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA014962 **Received** : 18 Mar 2024  
**Lab Number** : 06121591 **Tested** : 19 Mar 2024  
**Unique Number** : 10930424 **Diagnosed** : 21 Mar 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**GSI TECHNOLOGY**  
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 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)