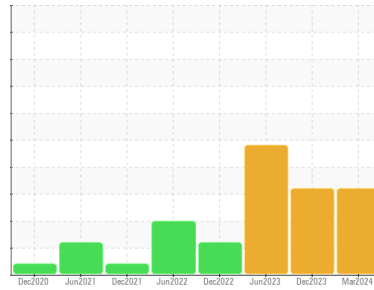




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id

**KAESER 7194424**

Component

**Compressor**

Fluid

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

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of particulates present in the oil. There is a light concentration of water 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>KCPA010446</b>	KCPA011387	KCPA001957
Sample Date	Client Info	<b>26 Mar 2024</b>	01 Dec 2023	06 Jun 2023
Machine Age	hrs	<b>23645</b>	22815	20087
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	1
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>3</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>9</b>	30	12
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	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 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>28</b>	0	10
Calcium	ppm	ASTM D5185m 2	<b>4</b>	0	1
Phosphorus	ppm	ASTM D5185m	<b>19</b>	0	2
Zinc	ppm	ASTM D5185m	<b>18</b>	0	18
Sulfur	ppm	ASTM D5185m	<b>21838</b>	15480	19522

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>4</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	<1
Water	%	ASTM D6304 >0.05	<b>▲ 0.284</b>	▲ 0.176	▲ 0.212
ppm Water	ppm	ASTM D6304 >500	<b>▲ 2840</b>	▲ 1760	▲ 2120

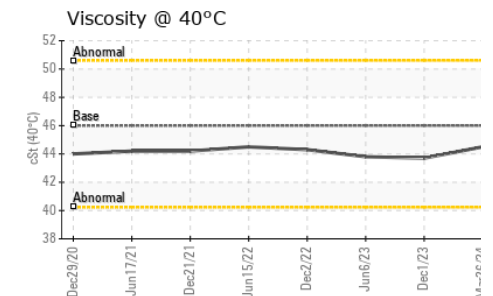
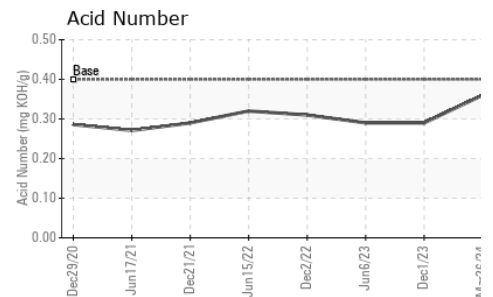
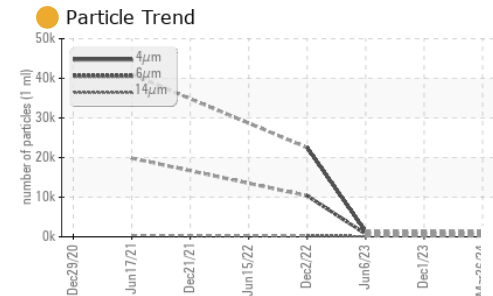
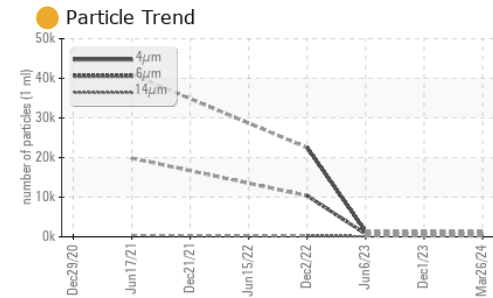
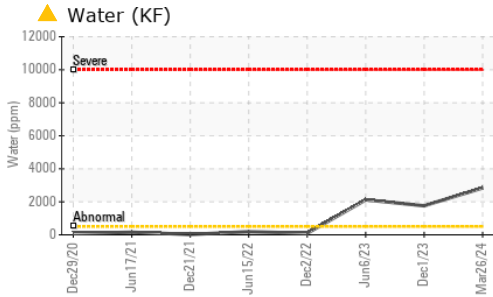
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>1209</b>	---	1325
Particles >6µm	ASTM D7647 >1300	<b>659</b>	---	722
Particles >14µm	ASTM D7647 >80	<b>● 112</b>	---	● 123
Particles >21µm	ASTM D7647 >20	<b>● 38</b>	---	● 41
Particles >38µm	ASTM D7647 >4	<b>● 6</b>	---	● 6
Particles >71µm	ASTM D7647 >3	<b>1</b>	---	1
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>● 17/17/14</b>	---	● 18/17/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.36</b>	0.29	0.29

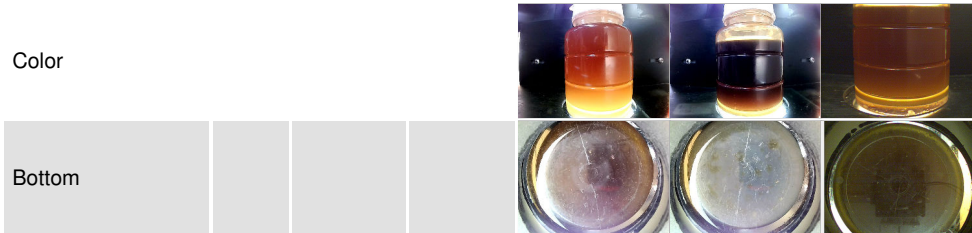
# OIL ANALYSIS REPORT



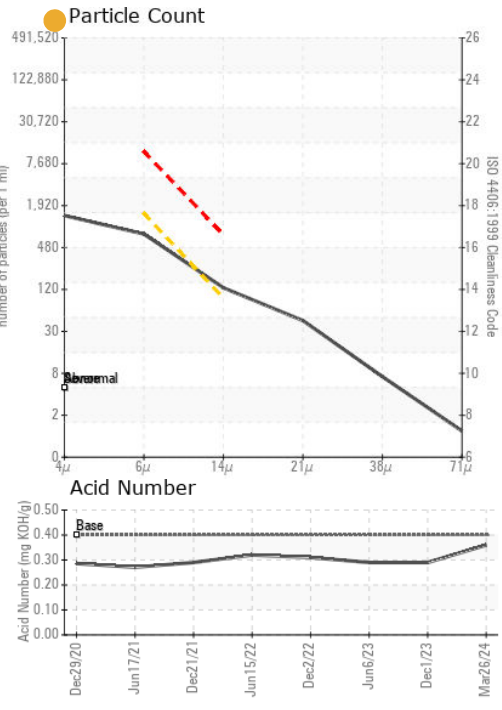
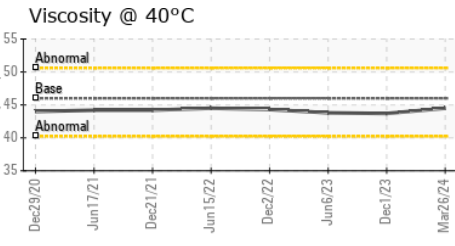
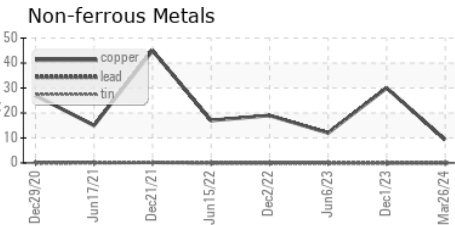
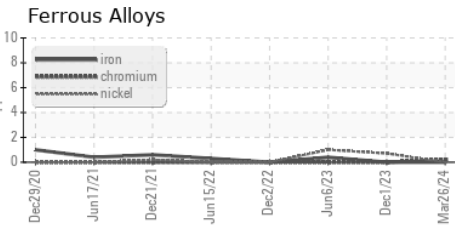
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 2.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.5	43.7	43.8

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010446 **Received** : 02 Apr 2024  
**Lab Number** : 06136415 **Tested** : 09 Apr 2024  
**Unique Number** : 10955880 **Diagnosed** : 09 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ORORA VISUAL**  
 3717 EXECUTIVE DR  
 MESQUITE, TX  
 US 75149  
 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)

T:  
F: