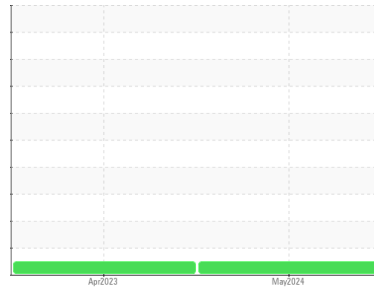




# OIL ANALYSIS REPORT

## Sample Rating Trend



Machine Id  
**4857258 (S/N 1310)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCPA014498</b>	KCPA002803	---
Sample Date	Client Info		<b>10 May 2024</b>	06 Apr 2023	---
Machine Age	hrs	Client Info	<b>86458</b>	77367	---
Oil Age	hrs	Client Info	<b>3000</b>	0	---
Oil Changed	Client Info		<b>Changed</b>	N/A	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	0	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>5</b>	3	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>1</b>	23	---
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>25</b>	44	---
Calcium	ppm	ASTM D5185m 0	<b>42</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>7</b>	<1	---
Zinc	ppm	ASTM D5185m 0	<b>68</b>	38	---
Sulfur	ppm	ASTM D5185m 23500	<b>19729</b>	20560	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>2</b>	13	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	---
Water	%	ASTM D6304 >0.05	<b>0.015</b>	0.022	---
ppm Water	ppm	ASTM D6304 >500	<b>156</b>	225.1	---

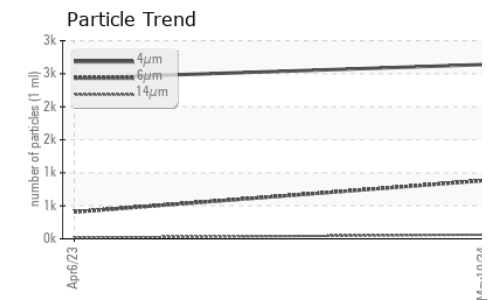
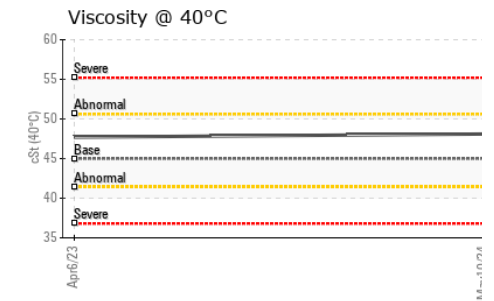
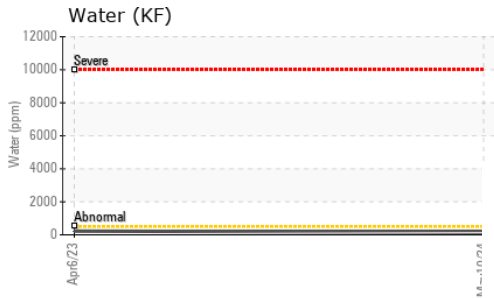
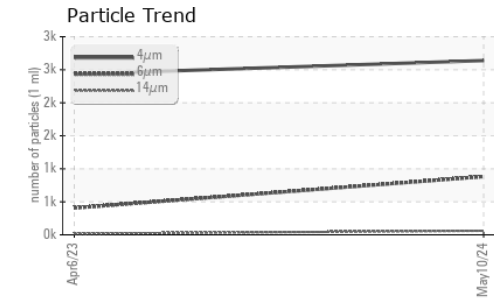
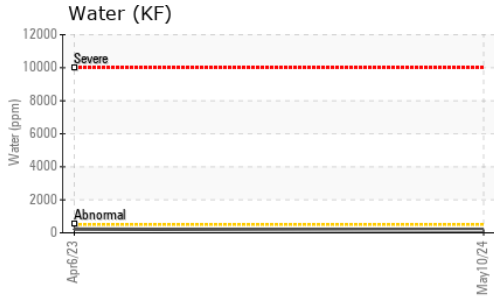
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>2639</b>	2433	---
Particles >6µm	ASTM D7647	>1300	<b>883</b>	406	---
Particles >14µm	ASTM D7647	>80	<b>61</b>	17	---
Particles >21µm	ASTM D7647	>20	<b>10</b>	5	---
Particles >38µm	ASTM D7647	>4	<b>1</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	18/16/11	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.41</b>	0.38	---

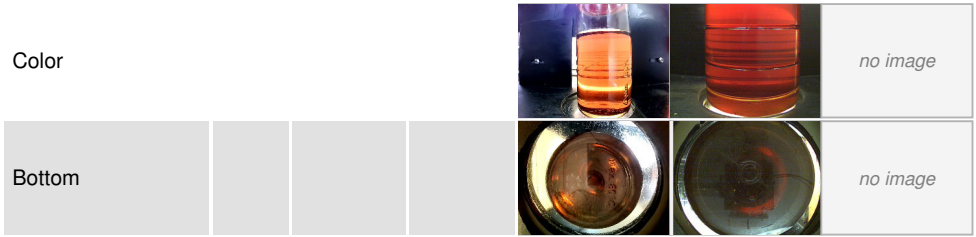
# OIL ANALYSIS REPORT



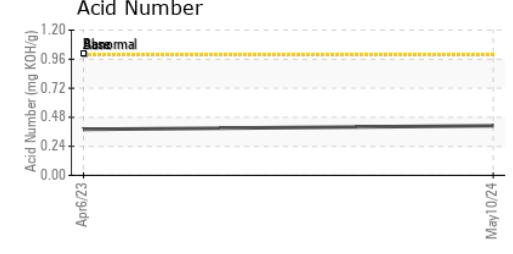
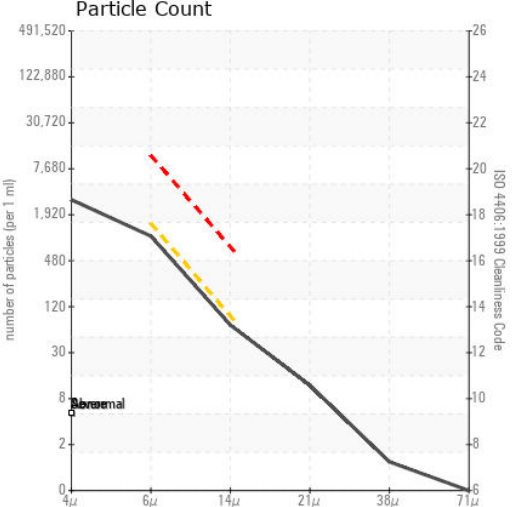
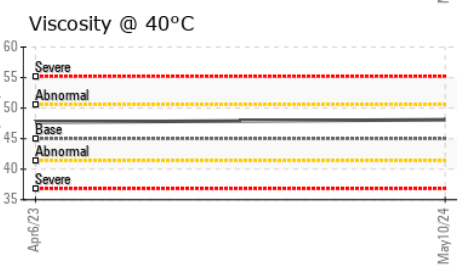
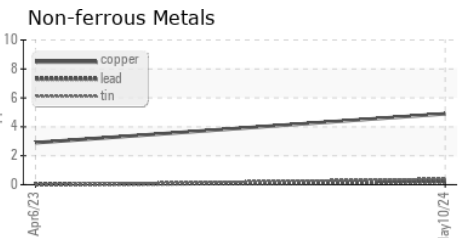
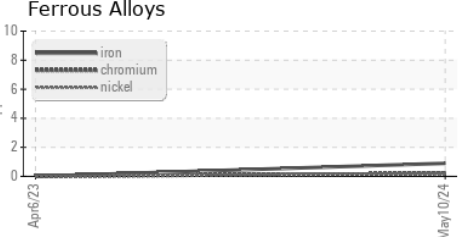
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.1	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.** : KCPA014498 **Received** : 18 Jun 2024  
**Lab Number** : 06213458 **Tested** : 19 Jun 2024  
**Unique Number** : 11086322 **Diagnosed** : 20 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ZEST ANCHORS**  
 2230 ENTERPRISE CT  
 ESCONDIDO, CA  
 US 92029  
 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)