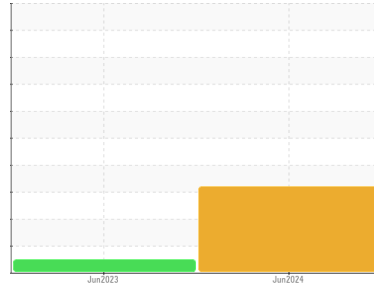




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**5657031 (S/N 1056)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

**DIAGNOSIS**

**▲ Recommendation**

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

**Wear**

All component wear rates are normal.

**▲ Contamination**

Excessive free water present. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA018930</b>	KCPA002232	---
Sample Date	Client Info			<b>11 Jun 2024</b>	06 Jun 2023	---
Machine Age	hrs	Client Info		<b>25875</b>	17204	---
Oil Age	hrs	Client Info		<b>8671</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>4</b>	5	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

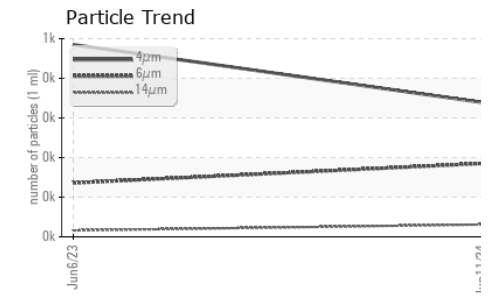
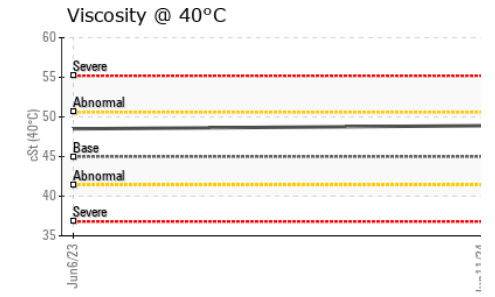
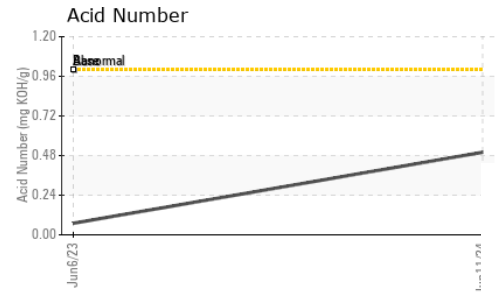
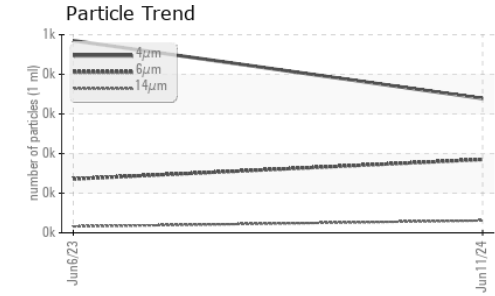
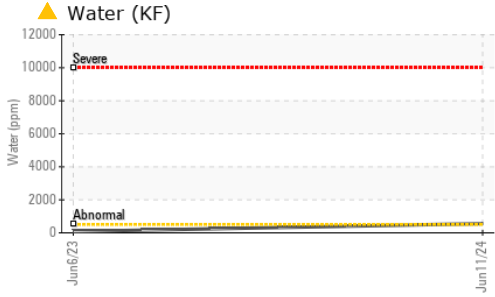
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>&lt;1</b>	0	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>8</b>	0	---
Zinc	ppm	ASTM D5185m	0	<b>6</b>	0	---
Sulfur	ppm	ASTM D5185m	23500	<b>17210</b>	18076	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	---
Sodium	ppm	ASTM D5185m		<b>0</b>	1	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.056</b>	0.008	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 560</b>	82.1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>339</b>	485	---
Particles >6µm		ASTM D7647	>1300	<b>185</b>	136	---
Particles >14µm		ASTM D7647	>80	<b>31</b>	16	---
Particles >21µm		ASTM D7647	>20	<b>11</b>	5	---
Particles >38µm		ASTM D7647	>4	<b>2</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>16/15/12</b>	16/14/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.50</b>	0.07	---

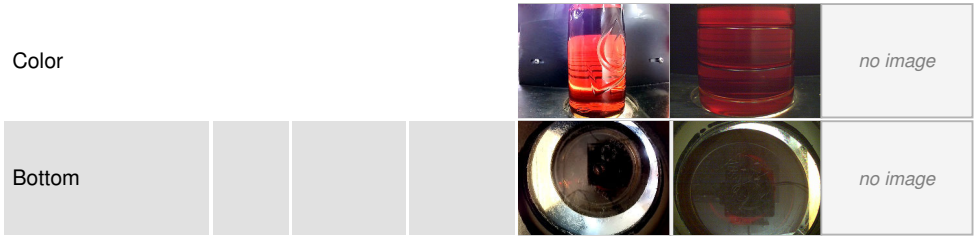
# OIL ANALYSIS REPORT



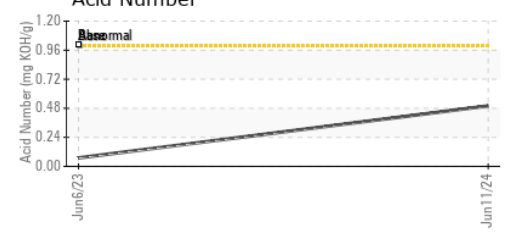
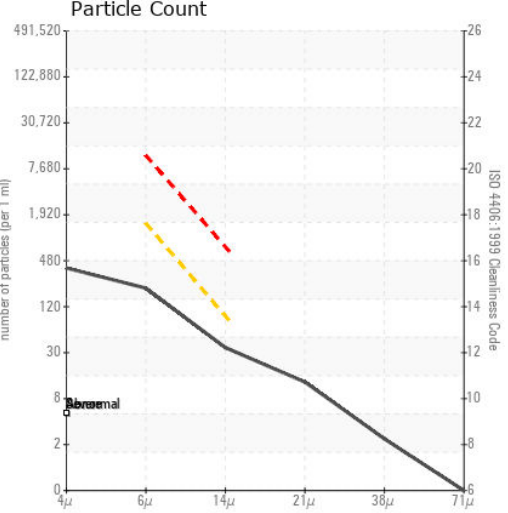
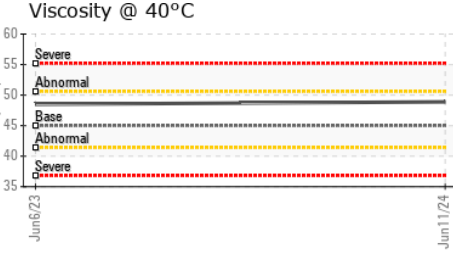
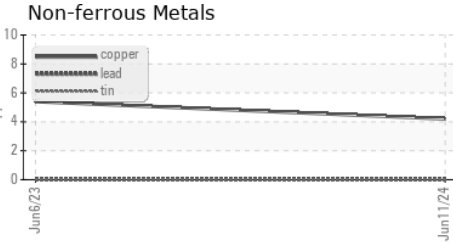
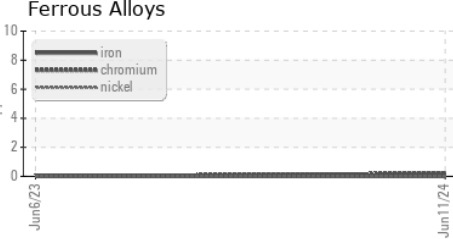
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual	▲ 10.0	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.9	48.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018930 **Received** : 14 Jun 2024  
**Lab Number** : 06210791 **Tested** : 18 Jun 2024  
**Unique Number** : 11083655 **Diagnosed** : 18 Jun 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**AIR PRODUCTS AND CHEMICALS**  
 5525 US 60  
 OWENSBORO, KY  
 US 42301  
 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)