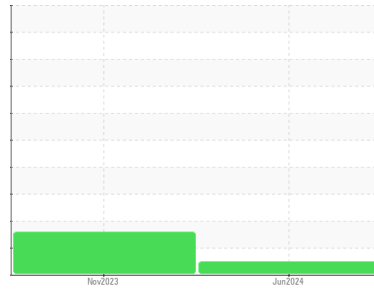




# OIL ANALYSIS REPORT

## Sample Rating Trend



Machine Id  
**8238725 (S/N 1212)**  
 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**  
 There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**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>KCPA006517</b>	KCPA007283	---
Sample Date	Client Info		<b>05 Jun 2024</b>	09 Nov 2023	---
Machine Age	hrs	Client Info	<b>3945</b>	3153	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

### WEAR METALS

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

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>28</b>	2	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 100	<b>76</b>	52	---
Calcium	ppm	ASTM D5185m 0	<b>2</b>	<1	---
Phosphorus	ppm	ASTM D5185m 0	<b>11</b>	0	---
Zinc	ppm	ASTM D5185m 0	<b>13</b>	12	---
Sulfur	ppm	ASTM D5185m 23500	<b>21407</b>	19004	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>18</b>	2	---
Sodium	ppm	ASTM D5185m	<b>11</b>	6	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	6	---
Water	%	ASTM D6304 >0.05	<b>0.018</b>	0.008	---
ppm Water	ppm	ASTM D6304 >500	<b>189</b>	90	---

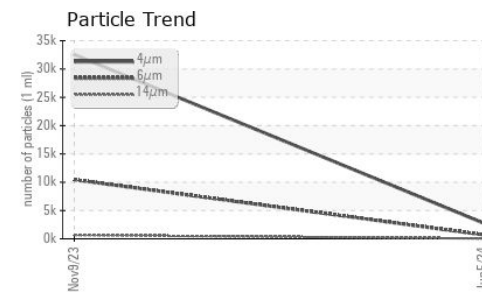
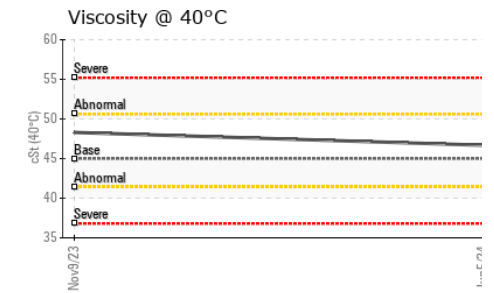
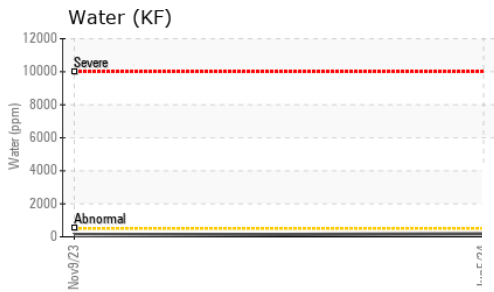
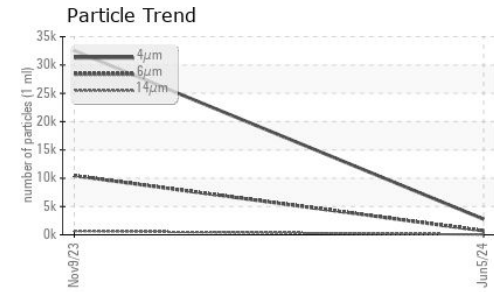
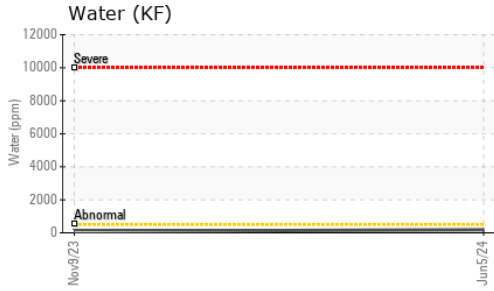
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>2770</b>	32541	---
Particles >6µm	ASTM D7647	>1300	<b>701</b>	▲ 10440	---
Particles >14µm	ASTM D7647	>80	<b>41</b>	▲ 655	---
Particles >21µm	ASTM D7647	>20	<b>5</b>	▲ 127	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	2	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	▲ 22/21/17	---

### FLUID DEGRADATION

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

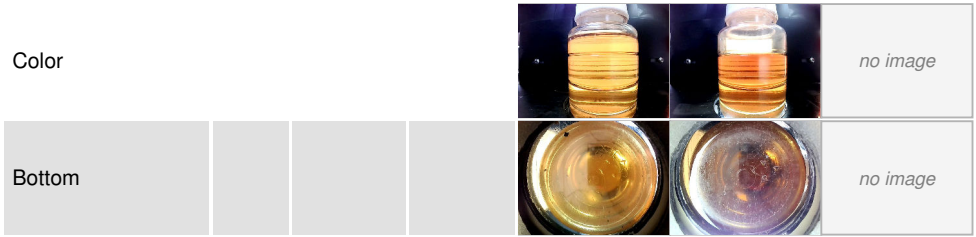
# OIL ANALYSIS REPORT



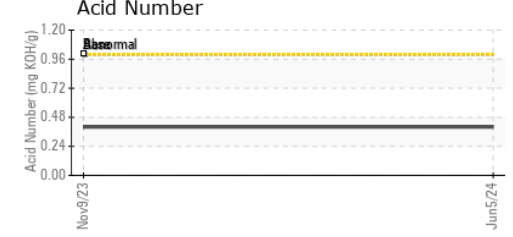
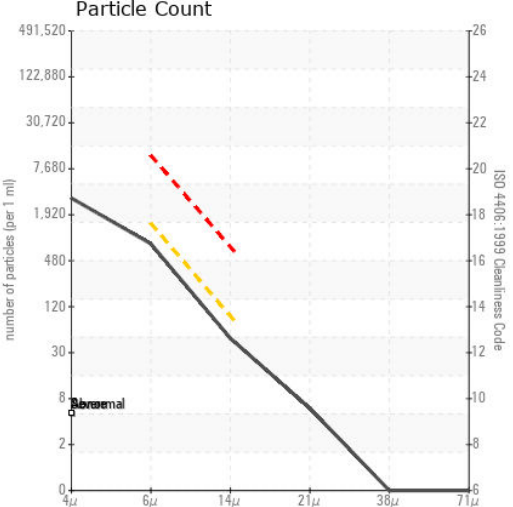
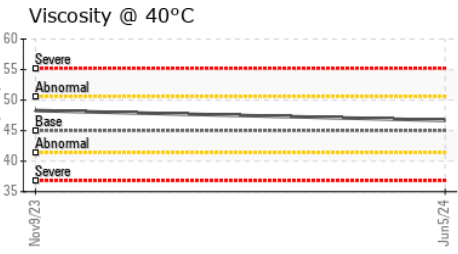
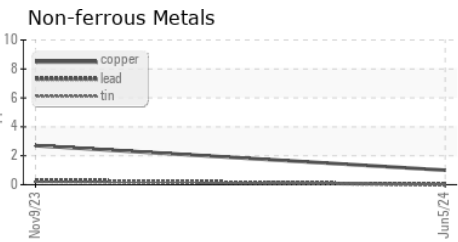
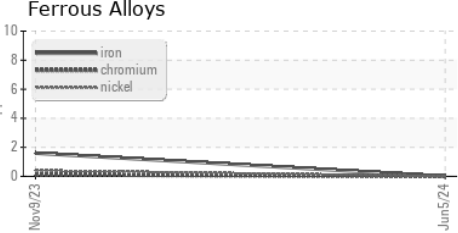
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	46.68	48.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006517 **Received** : 17 Jun 2024  
**Lab Number** : 06212471 **Tested** : 21 Jun 2024  
**Unique Number** : 11085335 **Diagnosed** : 21 Jun 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**HIGH DESERT TOOL & MOLD**  
 2500 ARROWHEAD DR, UNIT 5  
 CARSON CITY, NV  
 US 89706  
 Contact: JERRAD  
 jerrad@highdeserttool.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)