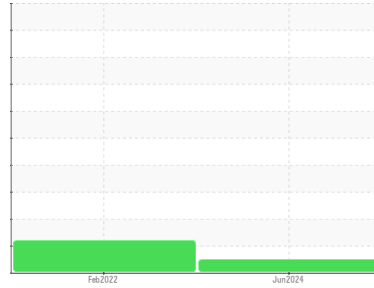




# OIL ANALYSIS REPORT

## Sample Rating Trend



Machine Id  
**5929728 (S/N 1217)**  
 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>KCPA018084</b>	KCP38160	---
Sample Date	Client Info		<b>20 Jun 2024</b>	21 Feb 2022	---
Machine Age	hrs	Client Info	<b>15391</b>	10692	---
Oil Age	hrs	Client Info	<b>0</b>	4000	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>13</b>	20	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
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>0</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>0</b>	1	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	0	---
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m 23500	<b>20568</b>	13665	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Water	%	ASTM D6304 >0.05	<b>0.007</b>	0.003	---
ppm Water	ppm	ASTM D6304 >500	<b>70</b>	36.5	---

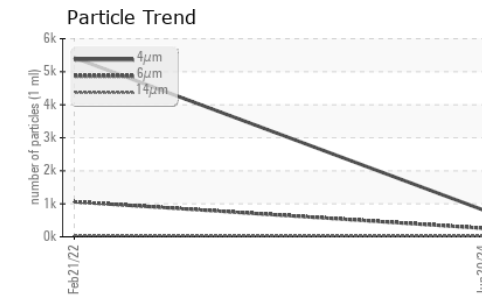
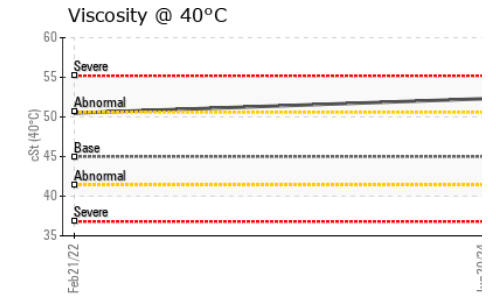
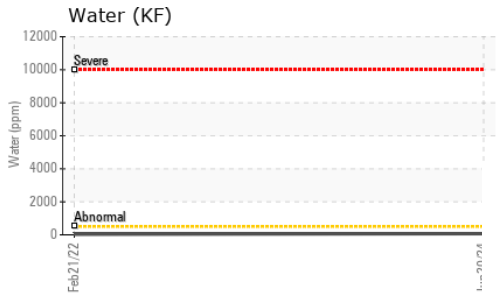
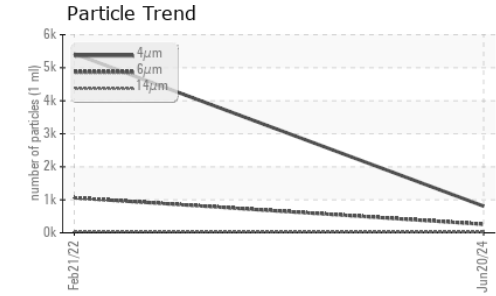
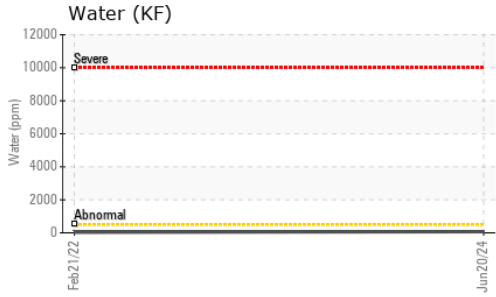
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>808</b>	5425	---
Particles >6µm	ASTM D7647	>1300	<b>260</b>	1060	---
Particles >14µm	ASTM D7647	>80	<b>19</b>	46	---
Particles >21µm	ASTM D7647	>20	<b>4</b>	10	---
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>17/15/11</b>	17/13	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.46</b>	▲ 0.62	---

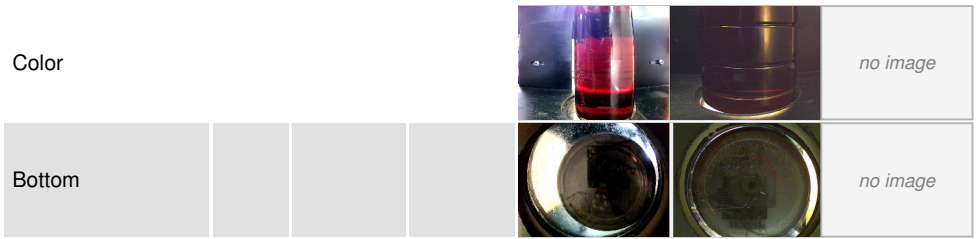
# OIL ANALYSIS REPORT



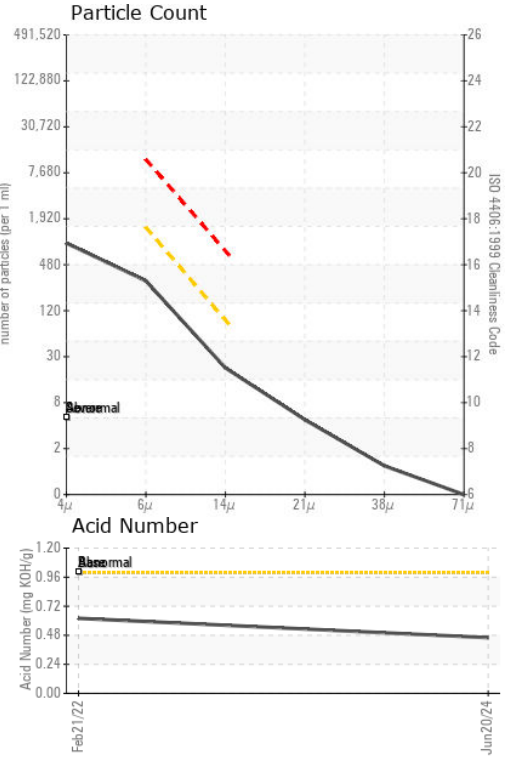
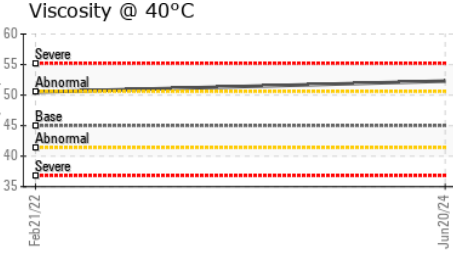
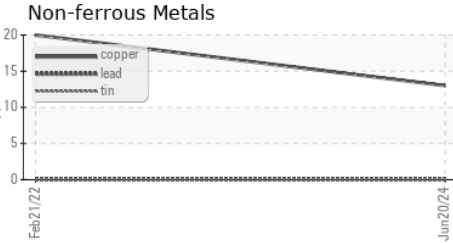
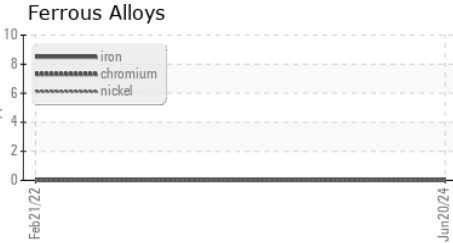
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	52.3	50.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018084 **Received** : 26 Jun 2024  
**Lab Number** : 06221246 **Tested** : 27 Jun 2024  
**Unique Number** : 11099443 **Diagnosed** : 27 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**INNOVITIVE CIRCUITS ENGINEERING INC**  
 2310 LUNDY AVE  
 SAN JOSE, CA  
 US 95131  
 Contact: RUBEN  
 ruben@icenginc.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)