



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**2892407 (S/N 4972)**

Component  
**Compressor**

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

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### ▲ Wear

The aluminum level is abnormal. All other component wear rates are normal.

### ▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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>KCPA008882</b>	---	---
Sample Date	Client Info			<b>09 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>4083</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>6</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>▲ 17</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	90	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m	2	<b>&lt;1</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>83</b>	---	---
Zinc	ppm	ASTM D5185m		<b>15</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>260</b>	---	---

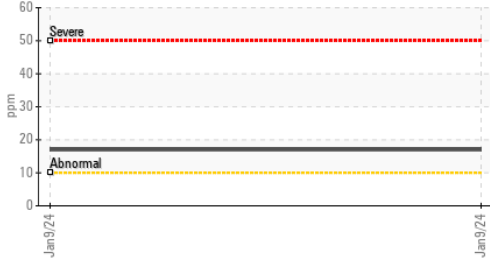
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>4</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.009</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>90</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>35341</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 2216</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>22</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>5</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 22/18/12</b>	---	---

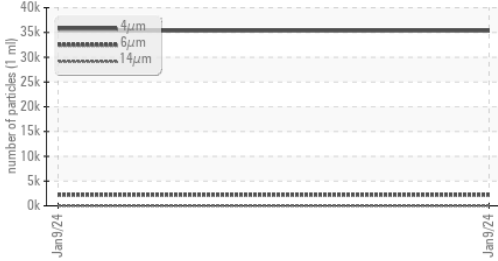
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.23</b>	---	---

# OIL ANALYSIS REPORT

## ▲ Aluminum (ppm)



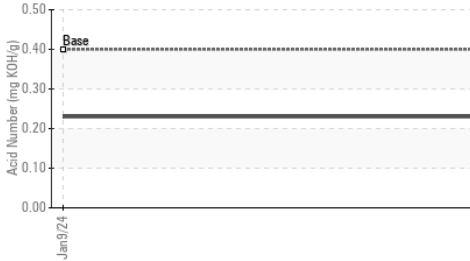
## ▲ Particle Trend



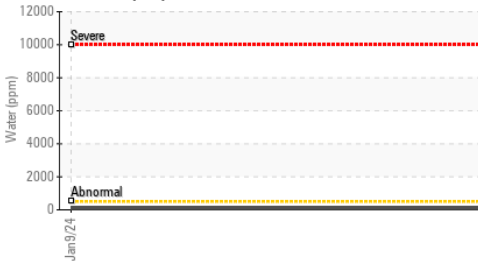
## Water (KF)



## Acid Number



## Water (KF)



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%	---
Free Water	scalar	*Visual		NEG	---

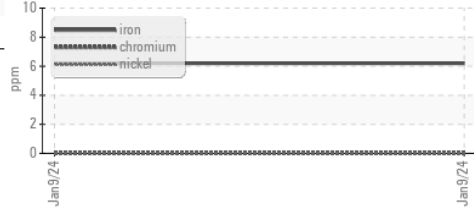
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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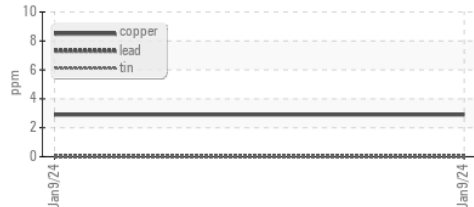
Color				no image	no image
Bottom				no image	no image

## GRAPHS

### Ferrous Alloys



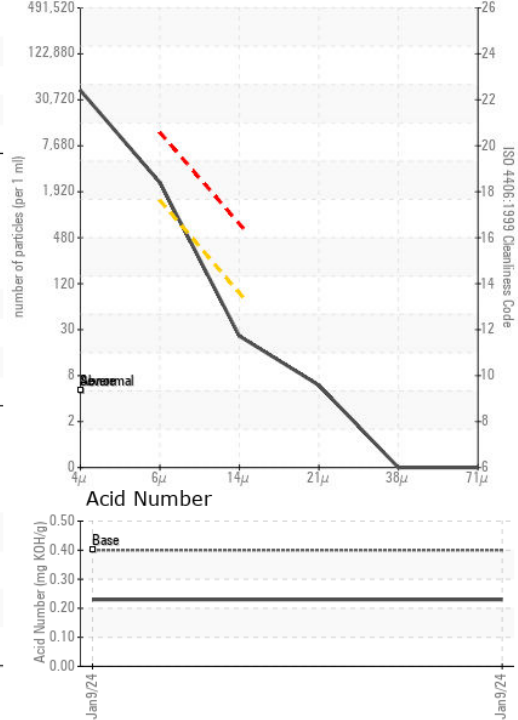
### Non-ferrous Metals



### Viscosity @ 40°C



### ▲ Particle Count



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA008882 **Received** : 16 Jan 2024  
**Lab Number** : 06062005 **Diagnosed** : 28 Jan 2024  
**Unique Number** : 10833387 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**LASER LAMINATIONS**  
 9444 MT HIGH RD  
 WARRIOR, AL  
 US 35180  
 Contact: CHRIS  
 chris@laserlaminations.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)

T:  
F: