



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**3838282 (S/N 1295)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

- Recommendation**  
 Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**  
 All component wear rates are normal.
- Contamination**  
 There is a moderate amount of particulates 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>KCPA017978</b>	---	---
Sample Date	Client Info		<b>25 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>36505</b>	---	---
Oil Age	hrs	Client Info	<b>2000</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ATTENTION</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</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>3</b>	---	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>21</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</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 0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m 100	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	---	---
Zinc	ppm	ASTM D5185m 0	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m 23500	<b>20405</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	---	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---
Water	%	ASTM D6304 >0.05	<b>0.006</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>64</b>	---	---

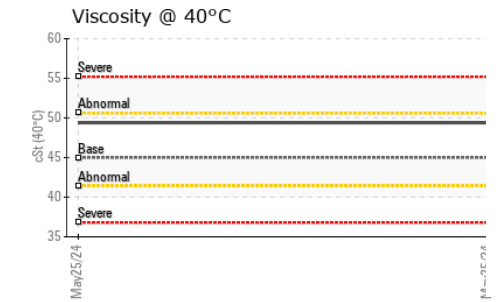
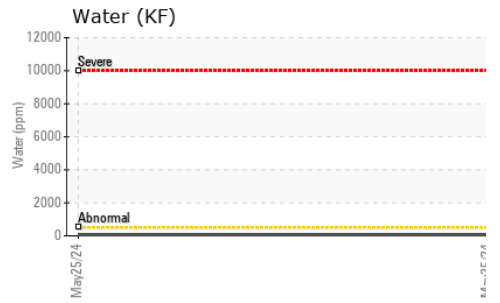
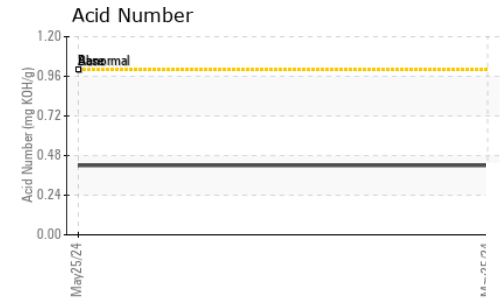
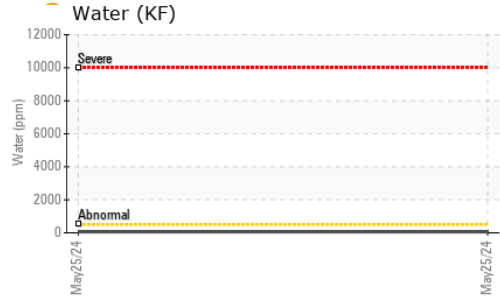
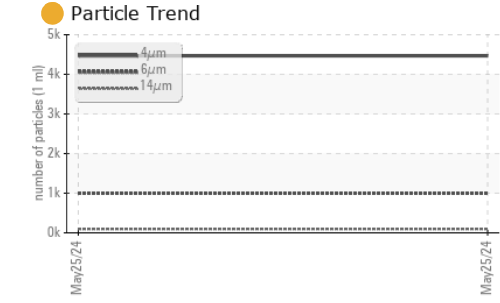
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4467</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>1000</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>96</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>33</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>8</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>5</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/17/14</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.42</b>	---	---

# OIL ANALYSIS REPORT



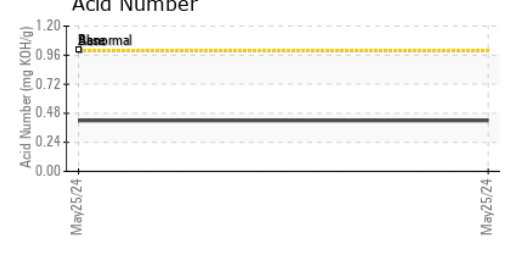
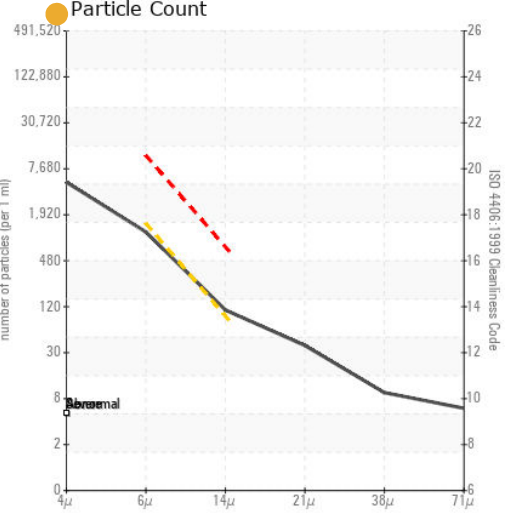
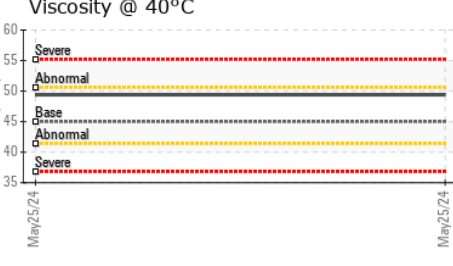
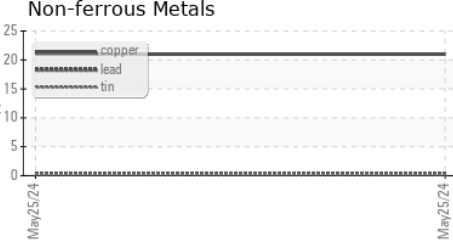
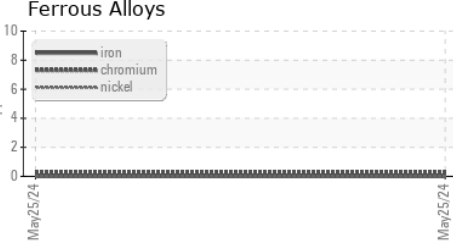
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	49.4	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA017978 **Received** : 04 Jun 2024  
**Lab Number** : 06199176 **Tested** : 05 Jun 2024  
**Unique Number** : 11061299 **Diagnosed** : 06 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ALPHA LASER INC**  
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 US 92878  
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 molly@alphalaser.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)