



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**6526135 (S/N 1061)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a light concentration of water 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>KCPA009072</b>	KCP54720	---
Sample Date	Client Info			<b>08 Jan 2024</b>	05 Mar 2023	---
Machine Age	hrs	Client Info		<b>17435</b>	15520	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>1</b>	<1	---
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>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	1	---
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>12</b>	12	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

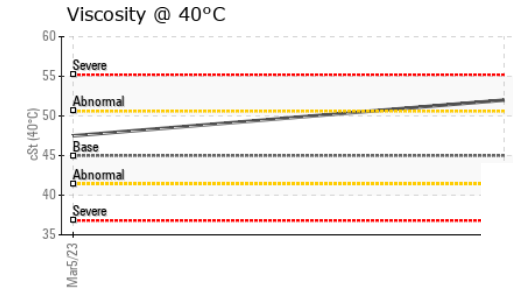
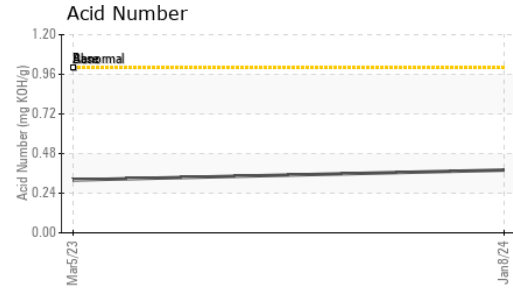
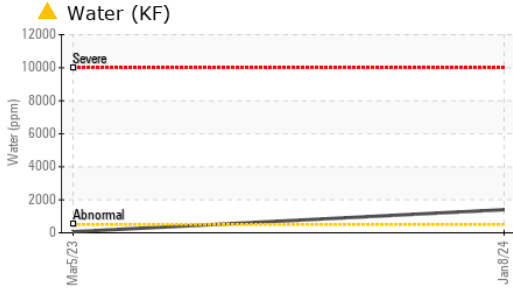
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>3</b>	<1	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>11</b>	2	---
Calcium	ppm	ASTM D5185m	0	<b>2</b>	<1	---
Phosphorus	ppm	ASTM D5185m	0	<b>48</b>	4	---
Zinc	ppm	ASTM D5185m	0	<b>76</b>	24	---
Sulfur	ppm	ASTM D5185m	23500	<b>21605</b>	16930	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	2	---
Sodium	ppm	ASTM D5185m		<b>0</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.140</b>	0.006	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 1400</b>	69.1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	9162	---
Particles >6µm		ASTM D7647	>1300	---	<b>▲ 3923</b>	---
Particles >14µm		ASTM D7647	>80	---	<b>▲ 447</b>	---
Particles >21µm		ASTM D7647	>20	---	<b>▲ 75</b>	---
Particles >38µm		ASTM D7647	>4	---	0	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	<b>▲ 20/19/16</b>	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.38</b>	0.32	---

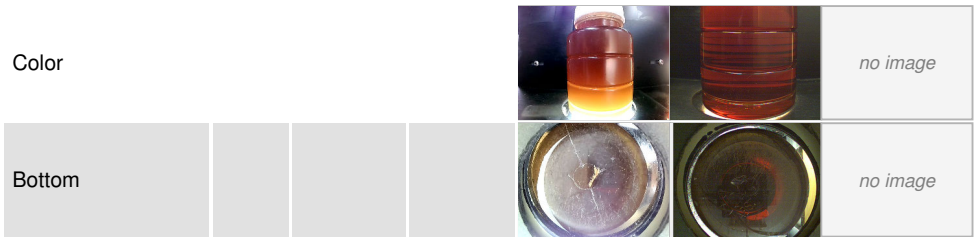
# OIL ANALYSIS REPORT



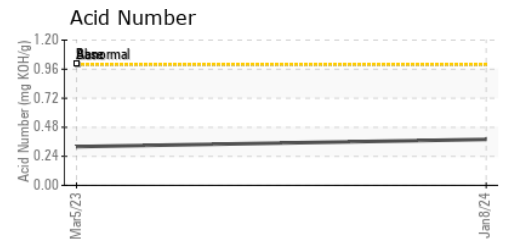
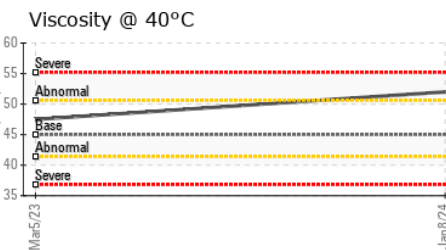
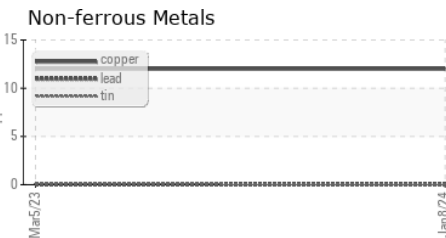
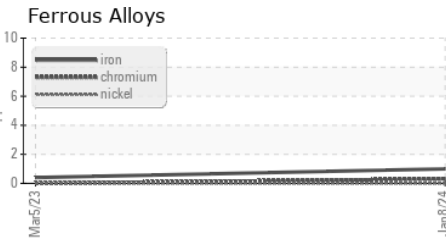
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45	<b>52.0</b>	47.5	---

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA009072 **Recieved** : 17 Jan 2024  
**Lab Number** : 06062704 **Diagnosed** : 24 Jan 2024  
**Unique Number** : 10834086 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NIPRO OPTICAL**  
 7 MARCONI ST  
 IRVINE, CA  
 US 92618  
 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)

T:  
F: