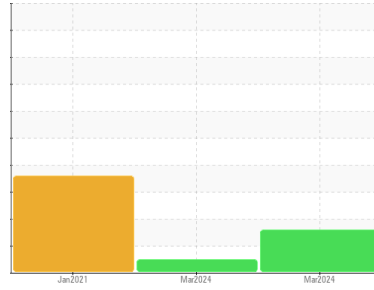




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id

**3807034 (S/N 1637)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) M-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

All component wear rates are normal.

### Contamination

There is a high 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>KCPA015080</b>	KCPA016359	KCP28998
Sample Date	Client Info	<b>25 Mar 2024</b>	25 Mar 2024	26 Jan 2021
Machine Age	hrs	<b>39851</b>	39851	28661
Oil Age	hrs	<b>2840</b>	2840	0
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>3</b>	2	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>11</b>	3	4
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	1
Barium	ppm	ASTM D5185m 90	<b>14</b>	2	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	1	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 100	<b>26</b>	55	<1
Calcium	ppm	ASTM D5185m 0	<b>0</b>	4	0
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	10	456
Zinc	ppm	ASTM D5185m 0	<b>&lt;1</b>	29	3
Sulfur	ppm	ASTM D5185m 23500	<b>19509</b>	22448	1871

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>0</b>	2	3
Sodium	ppm	ASTM D5185m	<b>18</b>	25	<1
Potassium	ppm	ASTM D5185m >20	<b>6</b>	5	0
Water	%	ASTM D6304 >0.05	<b>0.010</b>	0.026	▲ 0.126
ppm Water	ppm	ASTM D6304 >500	<b>108</b>	262	▲ 1260

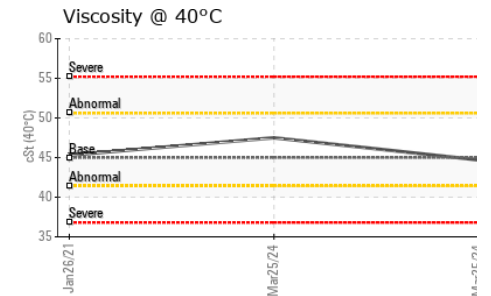
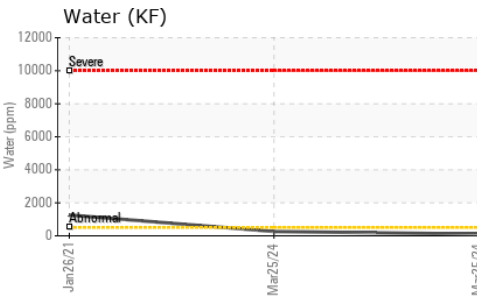
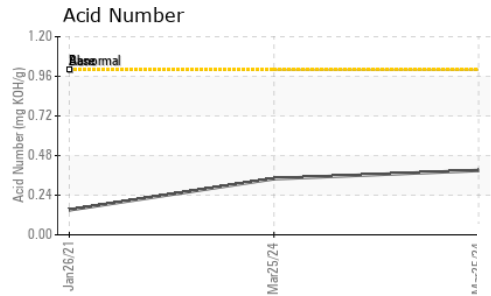
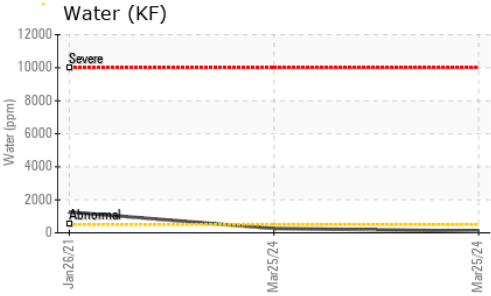
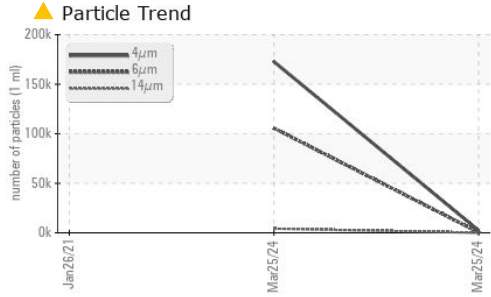
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>172732</b>	2353	---
Particles >6µm	ASTM D7647 >1300	▲ <b>105625</b>	449	---
Particles >14µm	ASTM D7647 >80	▲ <b>4179</b>	42	---
Particles >21µm	ASTM D7647 >20	▲ <b>329</b>	16	---
Particles >38µm	ASTM D7647 >4	<b>3</b>	2	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>25/24/19</b>	18/16/13	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.39</b>	0.34	0.151

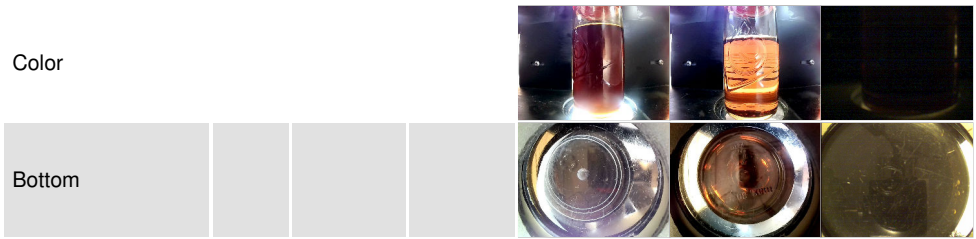
# OIL ANALYSIS REPORT



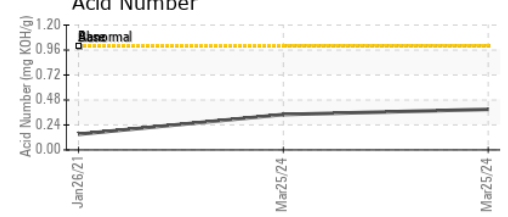
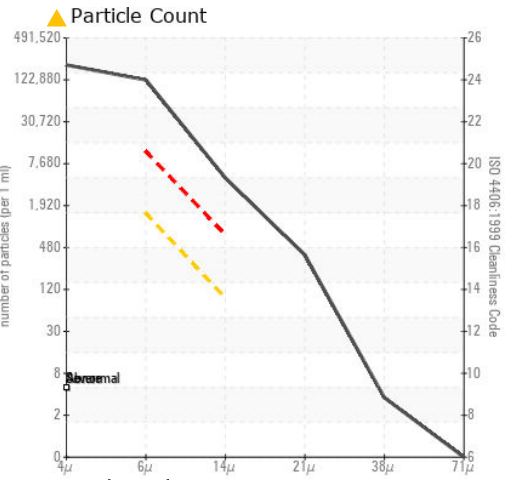
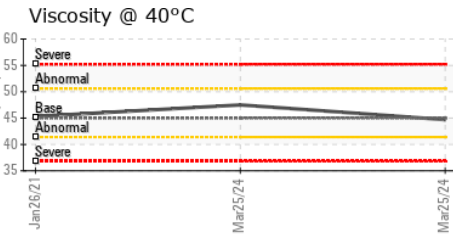
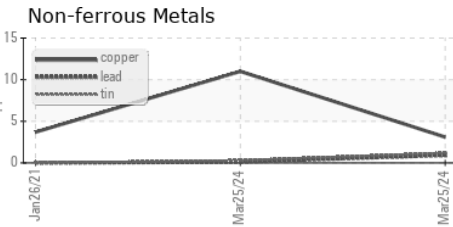
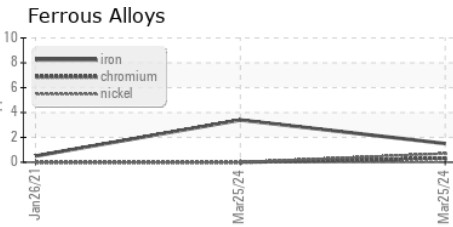
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	47.5	45.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015080 **Received** : 04 Apr 2024  
**Lab Number** : 06139274 **Tested** : 05 Apr 2024  
**Unique Number** : 10964082 **Diagnosed** : 06 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ZATEC LLC**  
 620 SPRING ST  
 NORTH DIGHTON, MA  
 US 02764  
 Contact: M. PIERCE  
 mpierce@zatecinc.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)