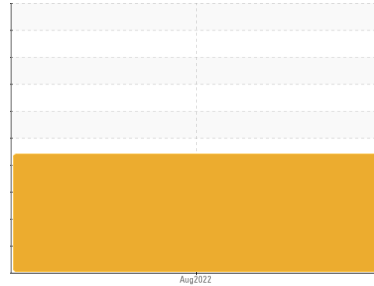


# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

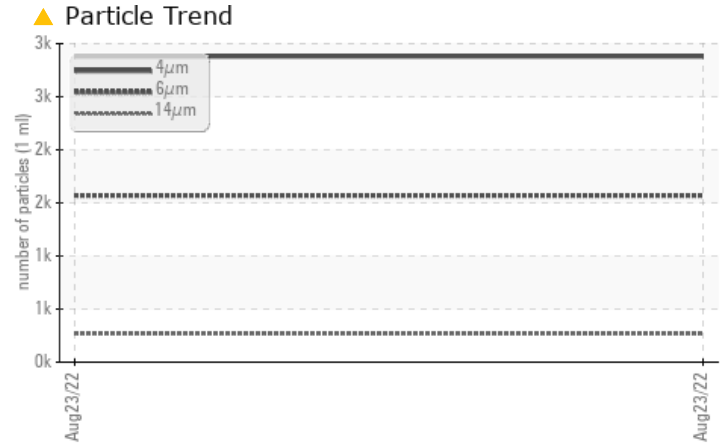
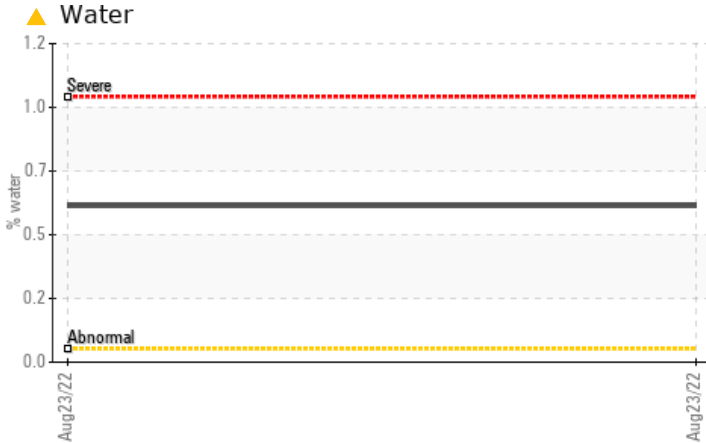


Machine Id  
**8022751 (S/N 1024)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.589</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 5890</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 1569</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 267</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 90</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>▲ 14</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 19/18/15</b>	---	---
Appearance	scalar	*Visual	NORML	<b>▲ HAZY</b>	---	---

Customer Id: MAPCAL  
Sample No.: KCP28599  
Lab Number: 05647875  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

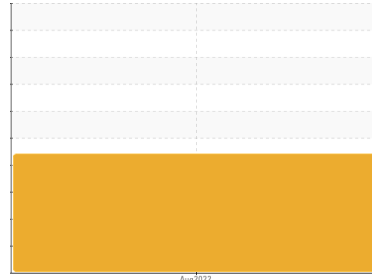
Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**8022751 (S/N 1024)**

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

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

Appearance is hazy. There is a high amount of particulates present in the oil. There is a moderate 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>KCP28599</b>	---	---
Sample Date	Client Info		<b>23 Aug 2022</b>	---	---
Machine Age	hrs	Client Info	<b>2409</b>	---	---
Oil Age	hrs	Client Info	<b>2409</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</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>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >50	<b>4</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

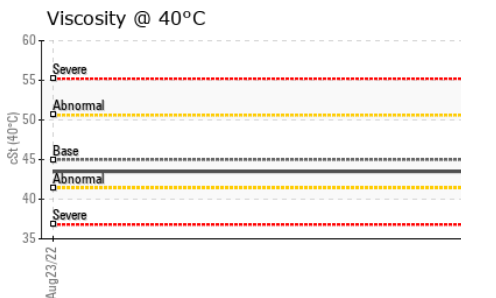
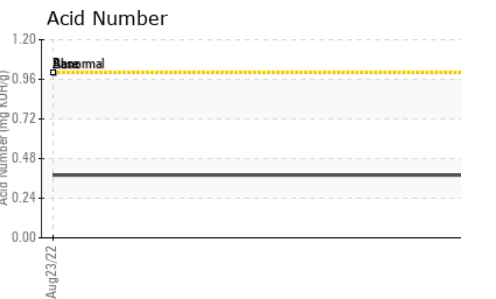
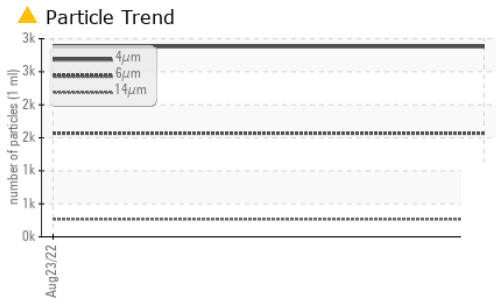
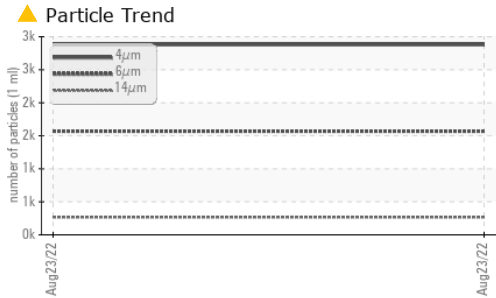
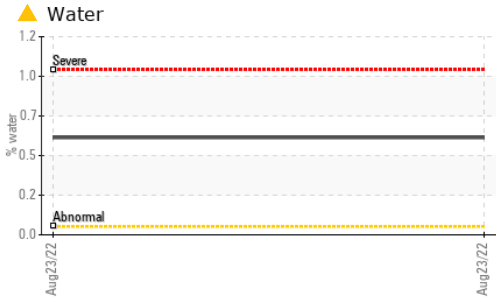
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m 90	<b>5</b>	---	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m 100	<b>37</b>	---	---
Calcium	ppm	ASTM D5185m 0	<b>1</b>	---	---
Phosphorus	ppm	ASTM D5185m 0	<b>2</b>	---	---
Zinc	ppm	ASTM D5185m 0	<b>6</b>	---	---
Sulfur	ppm	ASTM D5185m 23500	<b>20163</b>	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>9</b>	---	---
Water	%	ASTM D6304 >0.05	<b>▲ 0.589</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>▲ 5890</b>	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>2880</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 1569</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>▲ 267</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>▲ 90</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>▲ 14</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 19/18/15</b>	---	---

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

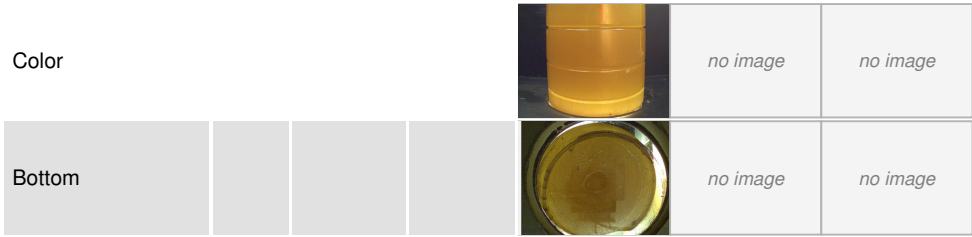
# OIL ANALYSIS REPORT



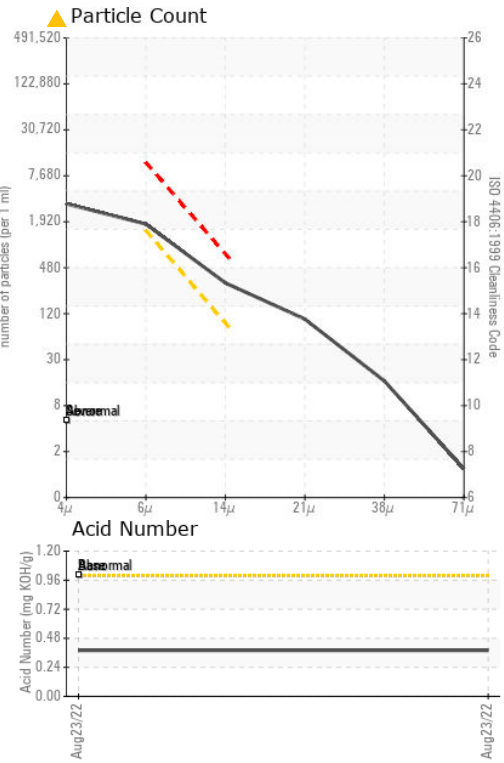
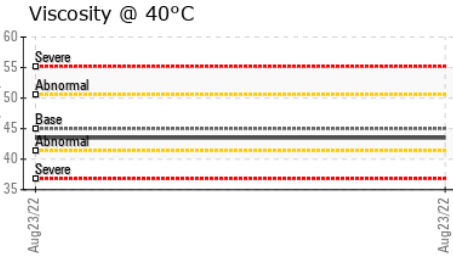
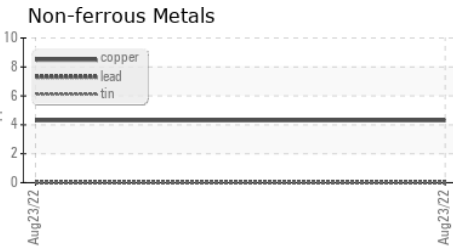
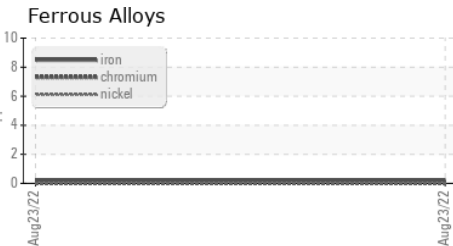
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	HAZY	---
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	45	43.5	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP28599 **Received** : 21 Sep 2022  
**Lab Number** : 05647875 **Diagnosed** : 27 Sep 2022  
**Unique Number** : 10142414 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**MAPEI CORP**  
 201 ENTERPRISE DR  
 CALHOUN, GA  
 US 30701  
 Contact: P. COREY  
 pcorey@mapei.com  
 T:  
 F:

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)