



# PROBLEM SUMMARY

Sample Rating Trend

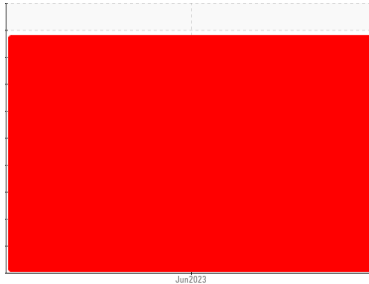
**WATER**



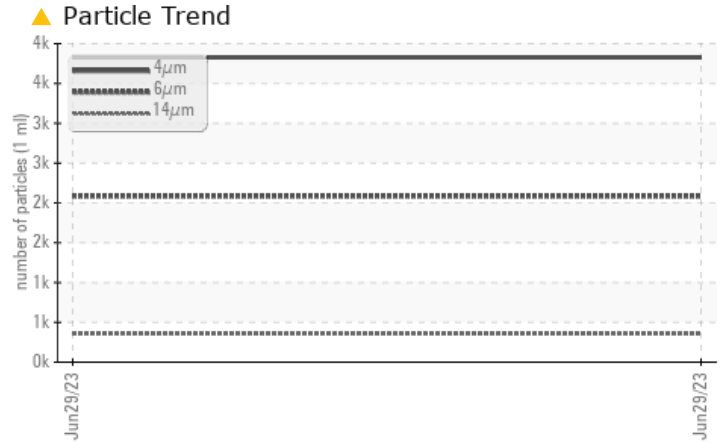
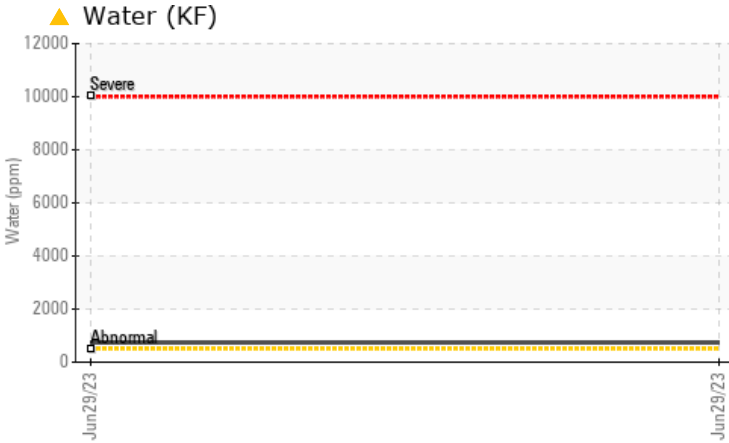
Machine Id  
**KAESER 1020**

Component  
**Compressor**

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



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We recommend you service the filters on this component. 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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Water	%	ASTM D6304	>0.05	▲ <b>0.074</b>	---	---
ppm Water	ppm	ASTM D6304	>500	▲ <b>740</b>	---	---
Particles >6µm		ASTM D7647	>1300	▲ <b>2085</b>	---	---
Particles >14µm		ASTM D7647	>80	▲ <b>355</b>	---	---
Particles >21µm		ASTM D7647	>20	▲ <b>120</b>	---	---
Particles >38µm		ASTM D7647	>4	▲ <b>18</b>	---	---
Particles >71µm		ASTM D7647	>3	▲ <b>2</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>19/18/16</b>	---	---
Free Water	scalar	*Visual		◆ <b>&gt;10%</b>	---	---

Customer Id: BELWAT  
Sample No.: KCPA003116  
Lab Number: 05979636  
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 Filter	---	---	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

**WATER**



Machine Id  
**KAESER 1020**

Component  
**Compressor**

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



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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 high amount of particulates present in the oil. Excessive free water present. 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>KCPA003116</b>	---	---
Sample Date	Client Info			<b>29 Jun 2023</b>	---	---
Machine Age	hrs	Client Info		<b>13782</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>SEVERE</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>0</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>16</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

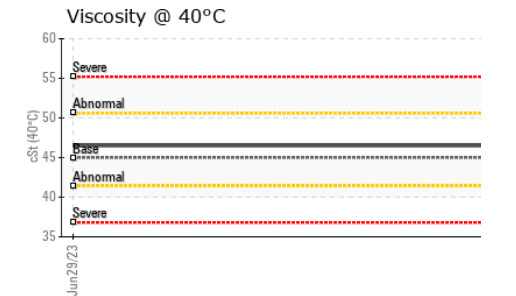
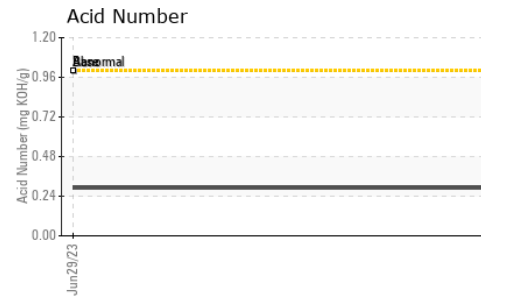
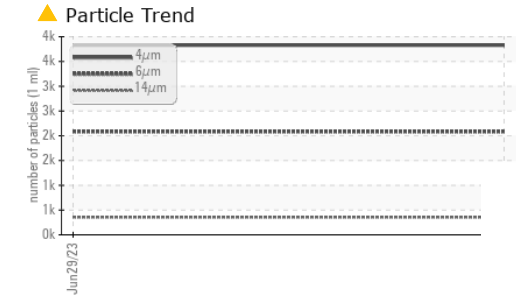
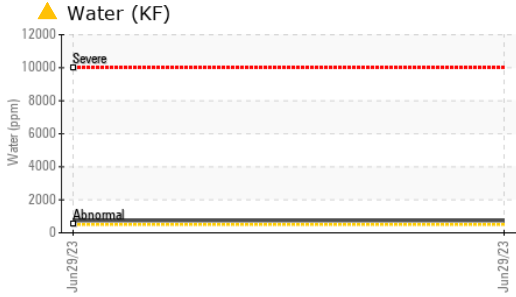
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	100	<b>11</b>	---	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	---	---
Zinc	ppm	ASTM D5185m	0	<b>57</b>	---	---
Sulfur	ppm	ASTM D5185m	23500	<b>18811</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>3</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water	%	ASTM D6304	>0.05	<b>▲ 0.074</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>▲ 740</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>3828</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 2085</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 355</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 120</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>▲ 18</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>▲ 2</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 19/18/16</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.29</b>	---	---

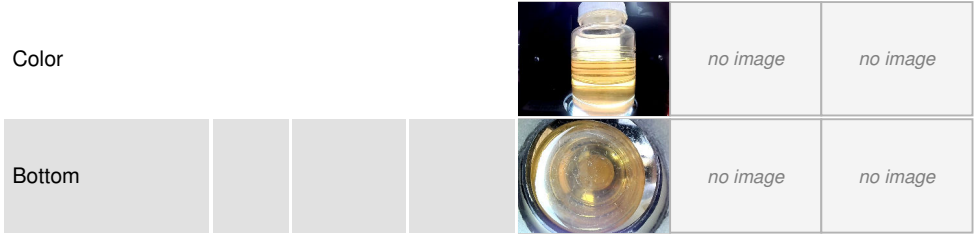
# OIL ANALYSIS REPORT



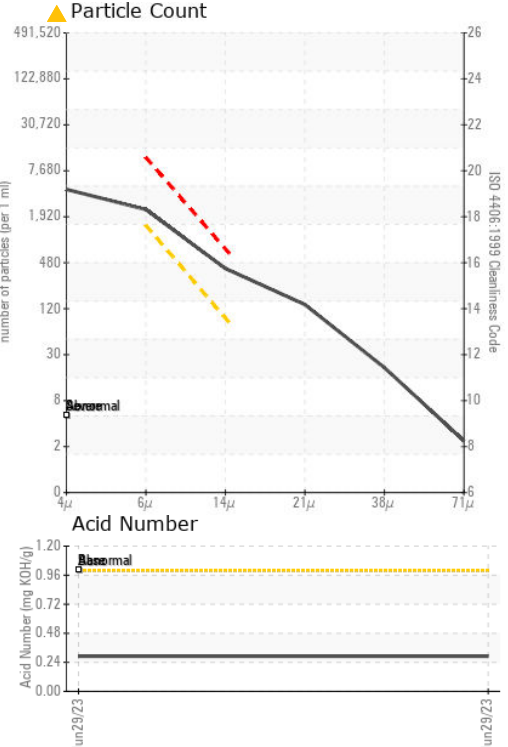
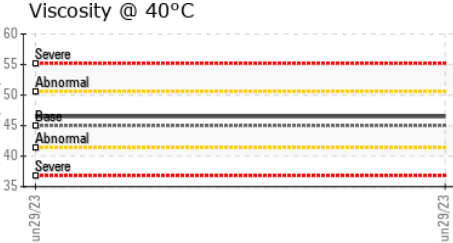
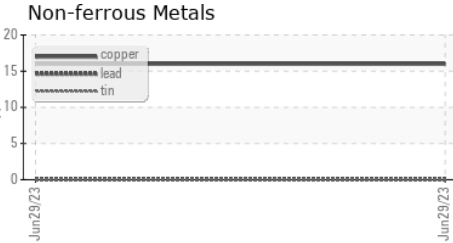
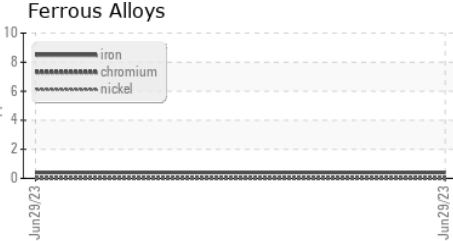
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	---	---
Free Water	scalar	*Visual		>10%	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45	46.5	---	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA003116 **Received** : 16 Oct 2023  
**Lab Number** : 05979636 **Diagnosed** : 19 Oct 2023  
**Unique Number** : 10696931 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BELLE TIRE WATERFORD #57**  
 39 N TELEGRAPH RD  
 WATERFORD, MI  
 US 48328  
 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)