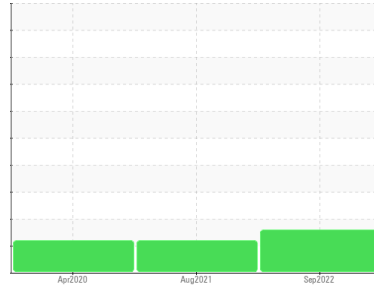


# PROBLEM SUMMARY

Sample Rating Trend



**WEAR**

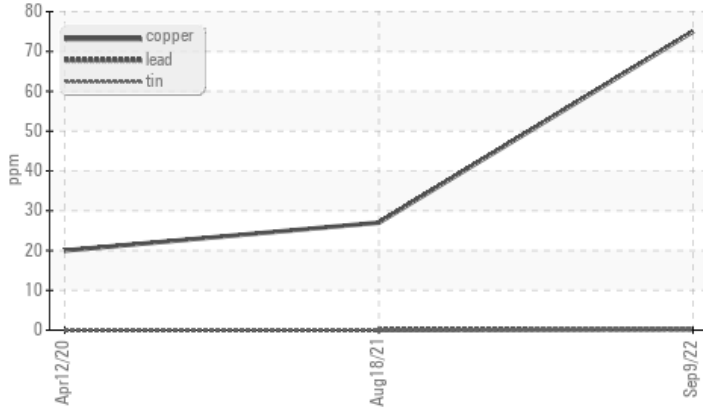


Machine Id  
**2785056 (S/N 3164)**

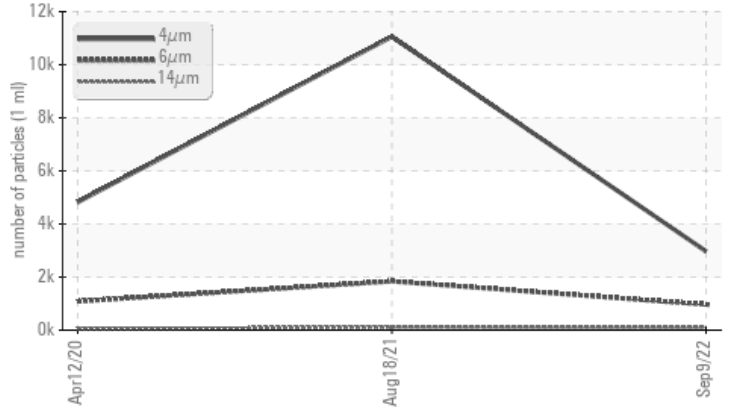
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



### ▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ABNORMAL
Copper	ppm	ASTM D5185m >50	▲ 75	27	20
Particles >14µm		ASTM D7647 >80	▲ 95	▲ 109	58
Oil Cleanliness		ISO 4406 (c) >--/17/13	▲ 19/17/14	▲ 18/14	17/13

Customer Id: BLUCARKCP  
Sample No.: KCP46151  
Lab Number: 05639127  
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

### 18 Aug 2021 Diag: Jonathan Hester

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 12 Apr 2020 Diag: Doug Bogart

ISO



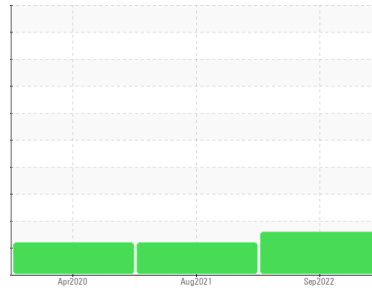
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**2785056 (S/N 3164)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### ▲ Wear

The copper level is abnormal. All other 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	history 1	history 2
Sample Number			<b>KCP46151</b>	KCP41633	KCP25186
Sample Date			<b>09 Sep 2022</b>	18 Aug 2021	12 Apr 2020
Machine Age	hrs		<b>35514</b>	27947	18762
Oil Age	hrs		<b>7567</b>	9185	0
Oil Changed			<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>▲ 75</b>	27	20
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m 90	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>&lt;1</b>	0	15
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 0	<b>11</b>	4	<1
Zinc	ppm	ASTM D5185m 0	<b>21</b>	0	12
Sulfur	ppm	ASTM D5185m 23500	<b>17491</b>	16301	18187

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	2	1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	3
Water	%	ASTM D6304 >0.05	<b>0.008</b>	0.008	0.009
ppm Water	ppm	ASTM D6304 >500	<b>86.0</b>	82.3	98.9

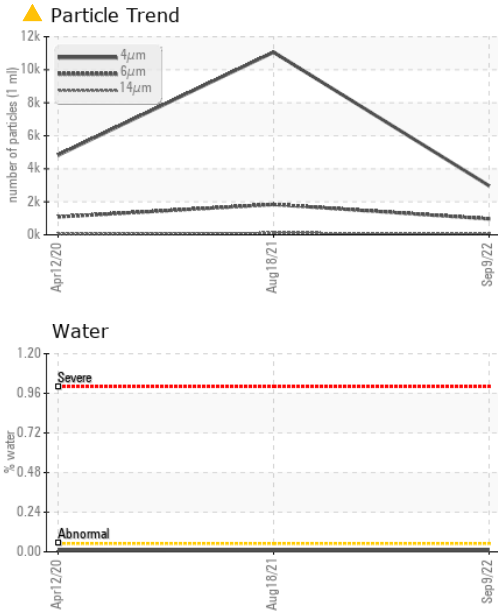
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>2970</b>	11061	4823
Particles >6µm	ASTM D7647 >1300		<b>964</b>	▲ 1838	1085
Particles >14µm	ASTM D7647 >80		<b>▲ 95</b>	▲ 109	58
Particles >21µm	ASTM D7647 >20		<b>18</b>	▲ 36	▲ 23
Particles >38µm	ASTM D7647 >4		<b>2</b>	3	▲ 11
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	▲ 8
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 19/17/14</b>	▲ 18/14	17/13

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.39</b>	0.406	0.381

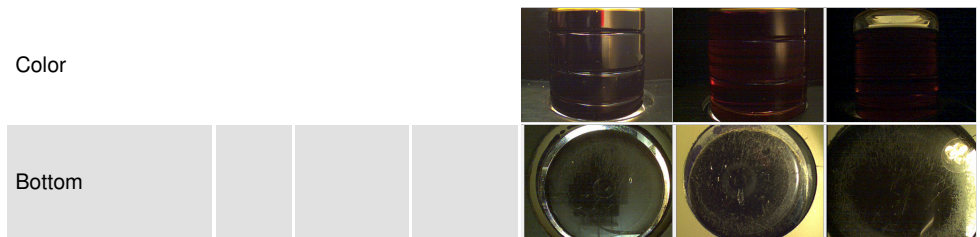
# OIL ANALYSIS REPORT



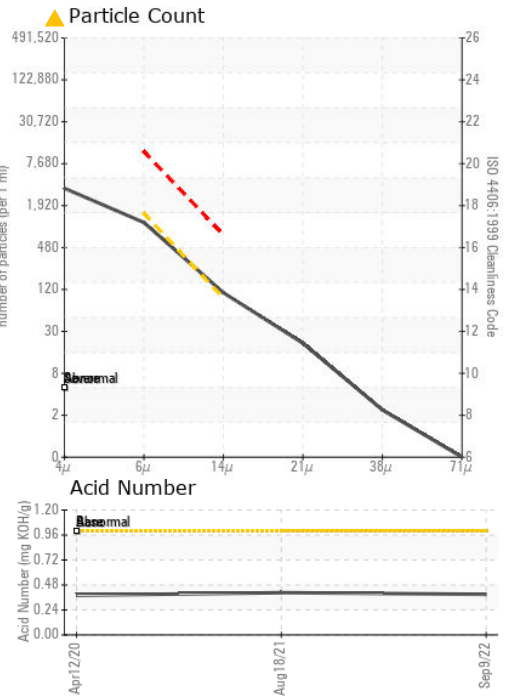
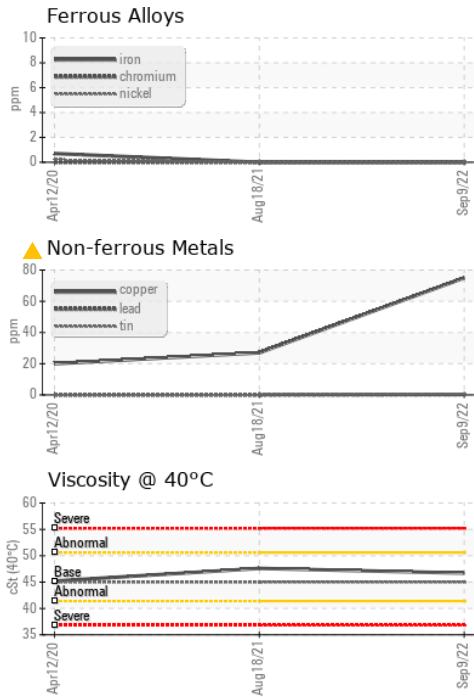
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	46.7	47.6

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
---------------	--------	------------	---------	-----------	-----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP46151 **Received** : 12 Sep 2022  
**Lab Number** : 05639127 **Diagnosed** : 14 Sep 2022  
**Unique Number** : 10128657 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BLUR DEVELOPMENT**  
 260 JAMES JACKSON AVE  
 CARY, NC  
 USA 27513  
 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: