



# PROBLEM SUMMARY

Sample Rating Trend



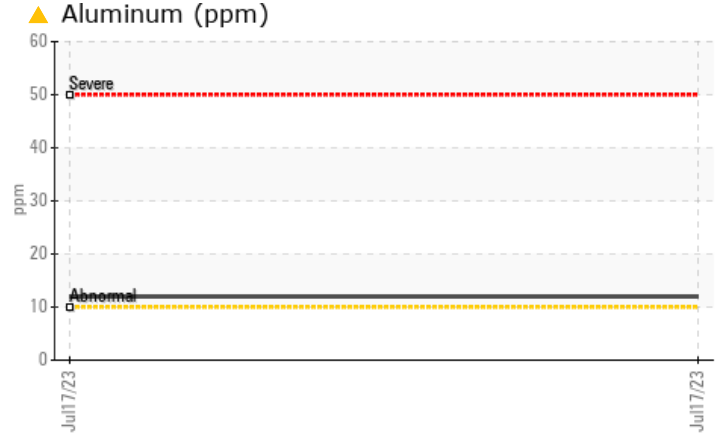
**WEAR**



Machine Id  
**8823391 (S/N 1574)**

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

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	---	---
Aluminum	ppm	ASTM D5185m >10	<b>▲ 12</b>	---	---
Particles >6µm		ASTM D7647 >1300	<b>▲ 11223</b>	---	---
Particles >14µm		ASTM D7647 >80	<b>▲ 583</b>	---	---
Particles >21µm		ASTM D7647 >20	<b>▲ 121</b>	---	---
Oil Cleanliness		ISO 4406 (c) >--/17/13	<b>▲ 23/21/16</b>	---	---

Customer Id: MPPDUQ  
Sample No.: KCPA004849  
Lab Number: 05903788  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

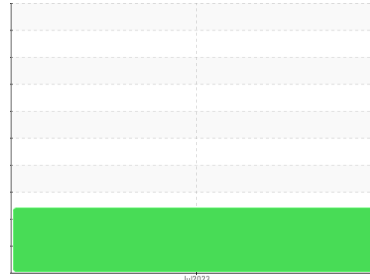
## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**8823391 (S/N 1574)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### ▲ Wear

The aluminum level is abnormal. All other 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA004849</b>	---	---
Sample Date	Client Info	<b>17 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>3573</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>3</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>▲ 12</b>	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	---
Copper	ppm	ASTM D5185m >50	<b>2</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	<b>0</b>	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m 90	<b>0</b>	---
Calcium	ppm	ASTM D5185m 2	<b>0</b>	---
Phosphorus	ppm	ASTM D5185m	<b>45</b>	---
Zinc	ppm	ASTM D5185m	<b>0</b>	---
Sulfur	ppm	ASTM D5185m	<b>4698</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	---
Water	%	ASTM D6304 >0.05	<b>0.004</b>	---
ppm Water	ppm	ASTM D6304 >500	<b>43.0</b>	---

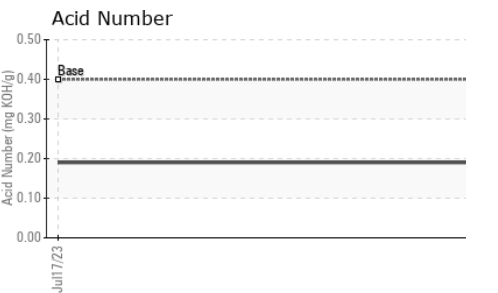
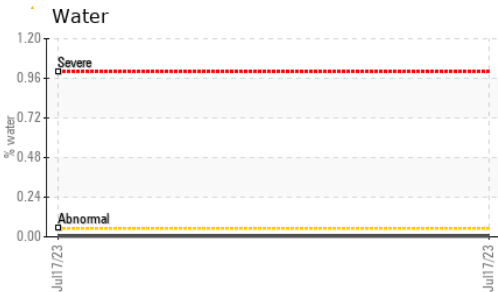
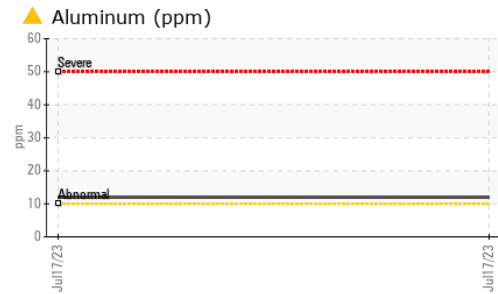
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>40677</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 11223</b>	---	---
Particles >14µm	ASTM D7647 >80	<b>▲ 583</b>	---	---
Particles >21µm	ASTM D7647 >20	<b>▲ 121</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>6</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 23/21/16</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.19</b>	---

# OIL ANALYSIS REPORT



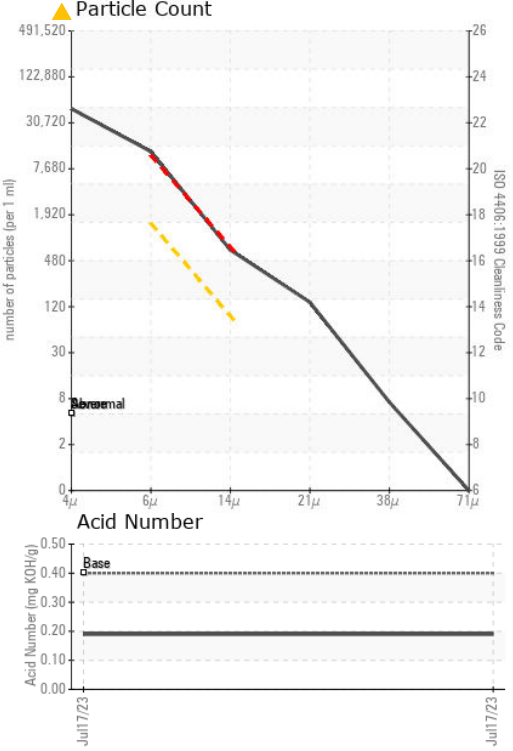
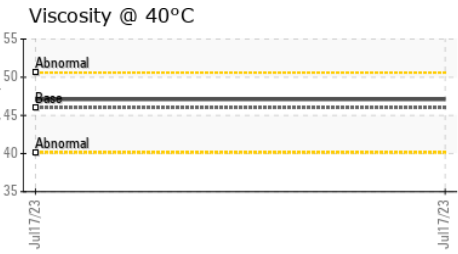
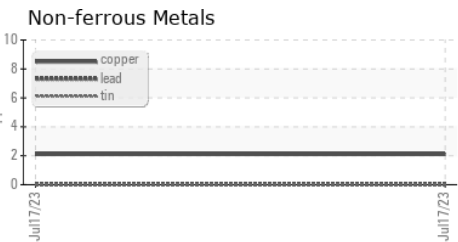
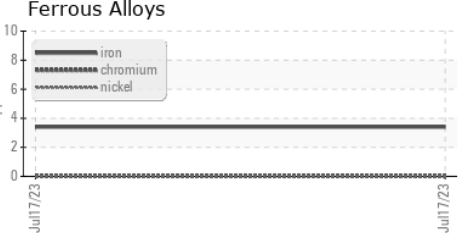
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004849 **Received** : 20 Jul 2023  
**Lab Number** : 05903788 **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565144 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**MPP GROUP OF COMPANIES INC**  
 1135 INDUSTRIAL PARK BLVD  
 DU QUOIN, IL  
 US 62832  
 Contact: A/P  
 ap@mppgroup.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)

T:  
F: