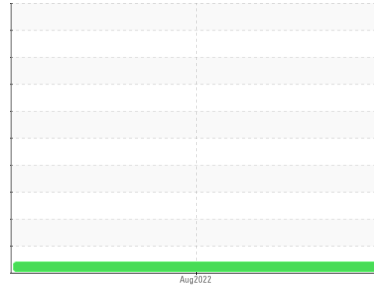




# PROBLEM SUMMARY

Sample Rating Trend



VIS DEBRIS



Area  
**[73048137]**  
Machine Id  
**4215601 (S/N 1121)**

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

## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## 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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Debris	scalar	*Visual	NONE	<b>▲ MODER</b>	---	---

Customer Id: HPMSAN  
Sample No.: KCP39786  
Lab Number: 05635001  
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.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

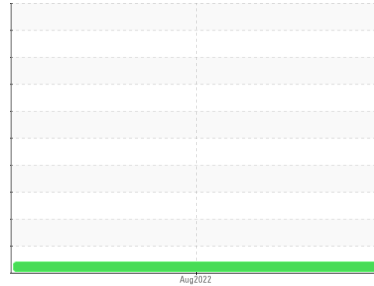
## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend

**VIS DEBRIS**

Area  
**[73048137]**  
Machine Id  
**4215601 (S/N 1121)**  
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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### ▲ Contamination

Moderate concentration of visible dirt/debris 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>KCP39786</b>	---	---
Sample Date			<b>29 Aug 2022</b>	---	---
Machine Age	hrs		<b>27841</b>	---	---
Oil Age	hrs		<b>3000</b>	---	---
Oil Changed			<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>2</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>8</b>	---	---
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history 1	history 2
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>0</b>	---	---
Magnesium	ppm ASTM D5185m	100	<b>4</b>	---	---
Calcium	ppm ASTM D5185m	0	<b>0</b>	---	---
Phosphorus	ppm ASTM D5185m	0	<b>2</b>	---	---
Zinc	ppm ASTM D5185m	0	<b>5</b>	---	---
Sulfur	ppm ASTM D5185m	23500	<b>18315</b>	---	---

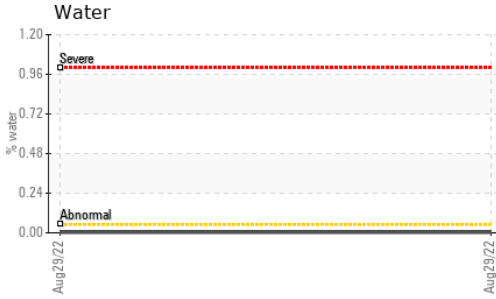
## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>0</b>	---	---
Sodium	ppm ASTM D5185m		<b>2</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>0</b>	---	---
Water	% ASTM D6304	>0.05	<b>0.003</b>	---	---
ppm Water	ppm ASTM D6304	>500	<b>34.1</b>	---	---

## FLUID DEGRADATION

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



# OIL ANALYSIS REPORT



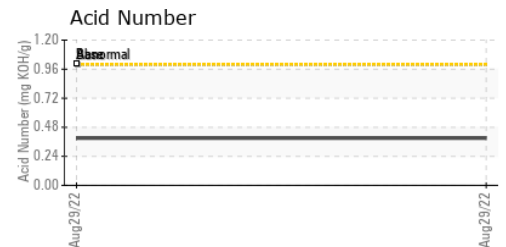
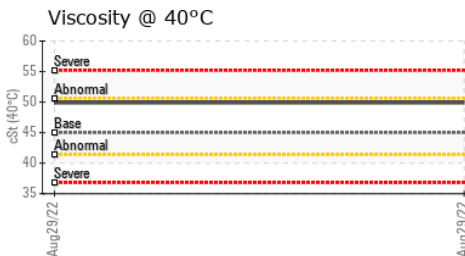
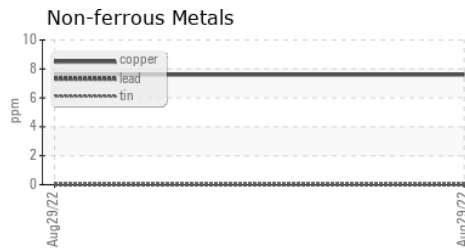
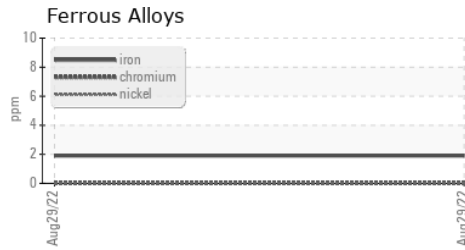
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	49.9	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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Color					no image	no image
Bottom					no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP39786 **Received** : 06 Sep 2022  
**Lab Number** : 05635001 **Diagnosed** : 08 Sep 2022  
**Unique Number** : 10124531 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**HP MACHINE & ENGINEERING INC**  
 2150 OAKLAND RD  
 SAN JOSE, CA  
 USA 95131  
 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: