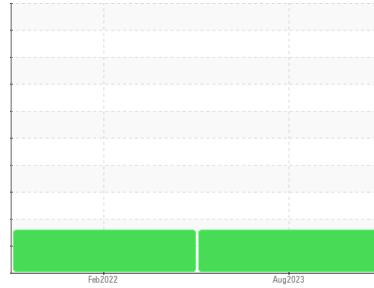




# PROBLEM SUMMARY

## Sample Rating Trend



ISO



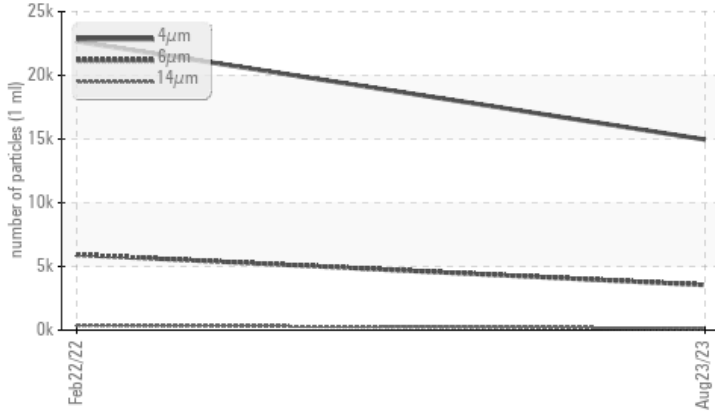
Machine Id  
**KAESER 4231444**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	---
Particles >6µm	ASTM D7647	>1300	▲ 3545	▲ 5914	---
Particles >14µm	ASTM D7647	>80	▲ 136	▲ 380	---
Particles >21µm	ASTM D7647	>20	▲ 32	▲ 68	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/14	▲ 20/16	---

Customer Id: MPMHIL  
Sample No.: KC05936129  
Lab Number: 05936129  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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

### 22 Feb 2022 Diag: Don Baldrige

ISO



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. 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



ISO



Machine Id  
**KAESER 4231444**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All 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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KC05936129</b>	KC95519	---
Sample Date	Client Info		<b>23 Aug 2023</b>	22 Feb 2022	---
Machine Age	hrs	Client Info	<b>27420</b>	24115	---
Oil Age	hrs	Client Info	<b>0</b>	2520	---
Oil Changed	Client Info		<b>N/A</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>2</b>	1	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>27</b>	12	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m 90	<b>2</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>4</b>	2	---
Magnesium	ppm	ASTM D5185m 100	<b>24</b>	51	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Phosphorus	ppm	ASTM D5185m 0	<b>2</b>	0	---
Zinc	ppm	ASTM D5185m 0	<b>18</b>	6	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	1	---
Sodium	ppm	ASTM D5185m	<b>3</b>	18	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	---
Water	%	ASTM D6304 >0.05	<b>0.018</b>	0.008	---
ppm Water	ppm	ASTM D6304 >500	<b>188.3</b>	82.0	---

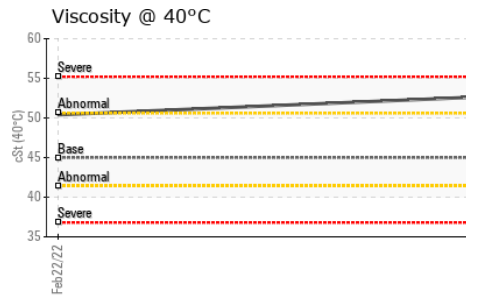
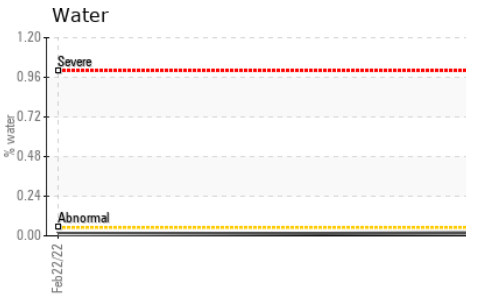
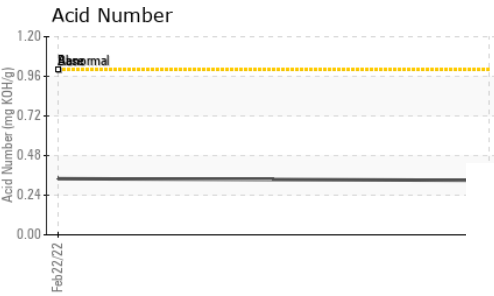
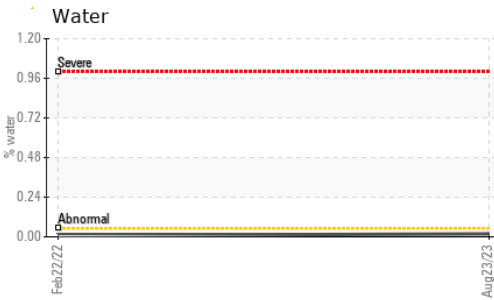
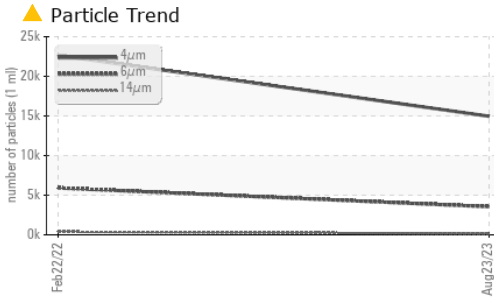
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>14959</b>	22661	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 3545</b>	▲ 5914	---
Particles >14µm	ASTM D7647	>80	<b>▲ 136</b>	▲ 380	---
Particles >21µm	ASTM D7647	>20	<b>▲ 32</b>	▲ 68	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	▲ 5	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 21/19/14</b>	▲ 20/16	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.33</b>	0.34	---

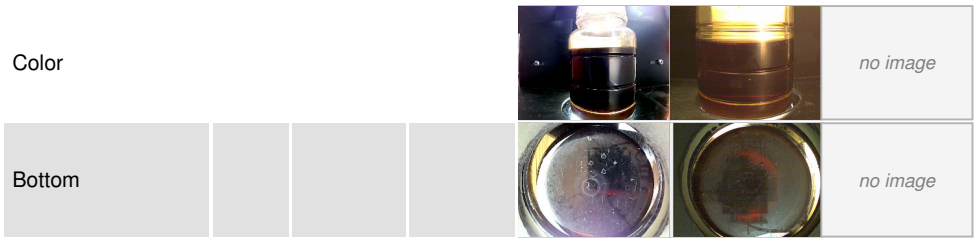
# OIL ANALYSIS REPORT



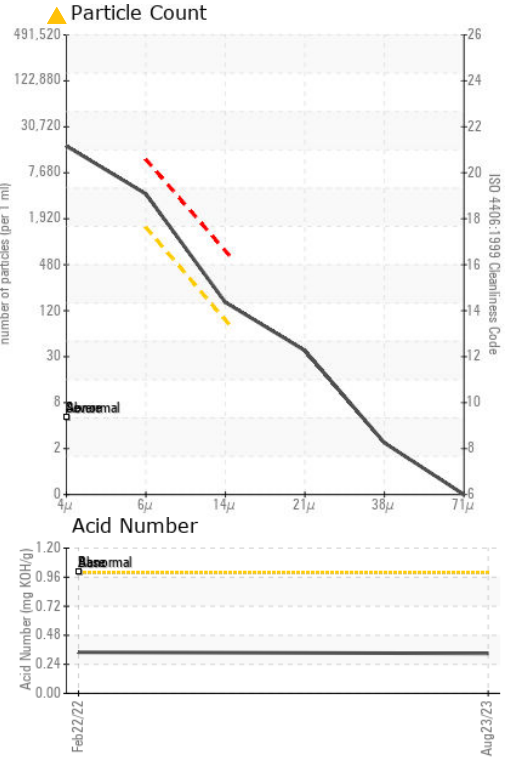
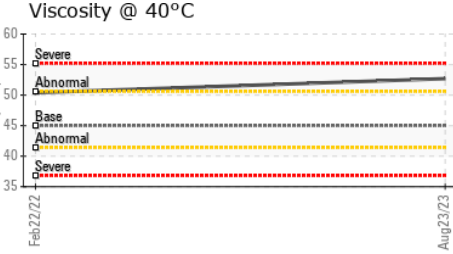
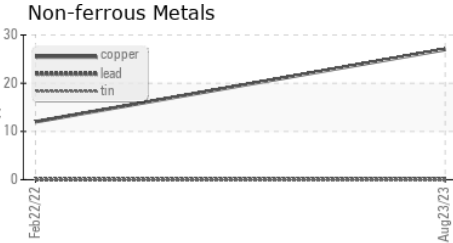
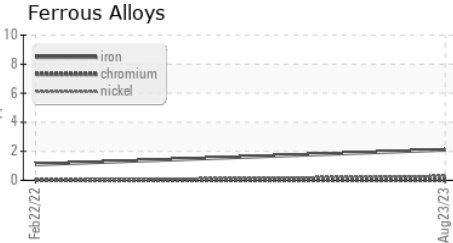
PARAMETER	VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE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

PARAMETER	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45	<b>52.7</b>	50.4	---

**SAMPLE IMAGES**



**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC05936129 **Received** : 28 Aug 2023  
**Lab Number** : 05936129 **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10621400 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**MPM DISPLAY INC**  
 1 US HIGHWAY WEST  
 HILLSIDE, NJ  
 US 07205  
 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)