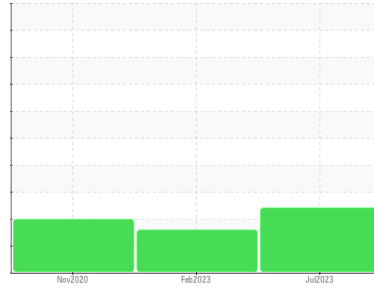


# PROBLEM SUMMARY

Sample Rating Trend



## VISCOSITY

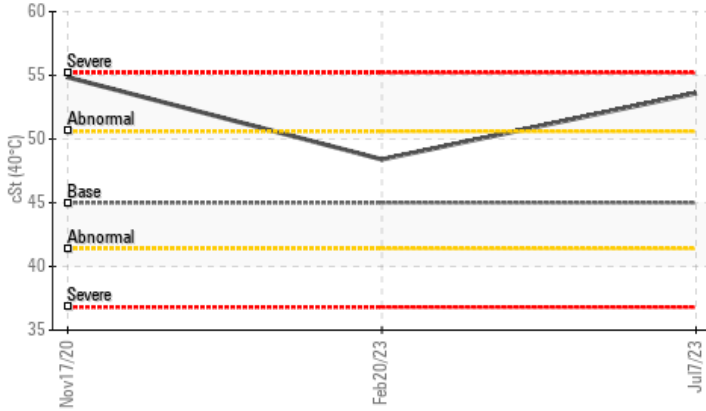


Machine Id  
**KAESER 5082053**

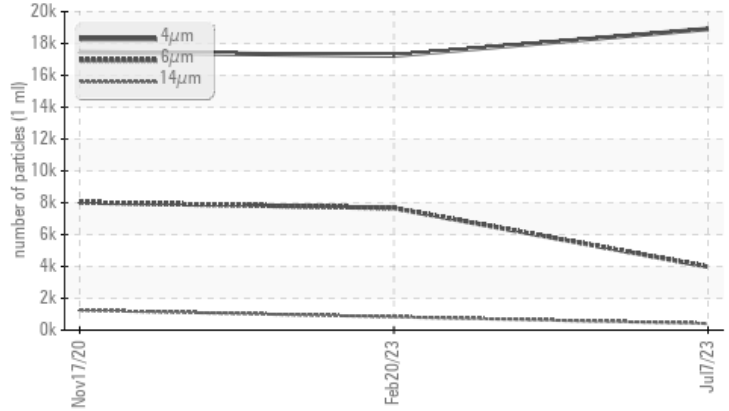
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Particle Trend



### RECOMMENDATION

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	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 3981	▲ 7665	▲ 8025
Particles >14µm	ASTM D7647	>80	▲ 416	▲ 836	▲ 1253
Particles >21µm	ASTM D7647	>20	▲ 187	▲ 125	▲ 362
Particles >38µm	ASTM D7647	>4	▲ 25	4	▲ 13
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/16	▲ 21/20/17	▲ 20/17
Visc @ 40°C	cSt	ASTM D445 45	▲ 53.6	48.4	▲ 54.85

Customer Id: CITCUL  
Sample No.: KCPA004648  
Lab Number: 05898646  
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

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

### 20 Feb 2023 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 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](#)



### 17 Nov 2020 Diag: Jonathan Hester

#### VISCOSITY



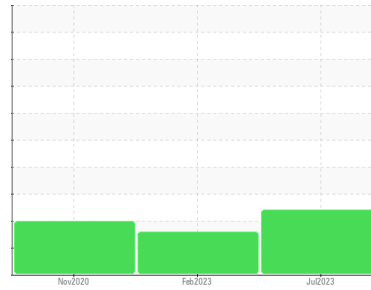
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

[view report](#)



# OIL ANALYSIS REPORT

Sample Rating Trend



**VISCOSITY**



Machine Id  
**KAESER 5082053**

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

**DIAGNOSIS**

▲ **Recommendation**

Oil and 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 oil viscosity is higher than normal. The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA004648</b>	KCP46243	KCP29984
Sample Date	Client Info		<b>07 Jul 2023</b>	20 Feb 2023	17 Nov 2020
Machine Age	hrs	Client Info	<b>52498</b>	49278	32540
Oil Age	hrs	Client Info	<b>34002</b>	49278	32540
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>7</b>	15	8
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	8
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>2</b>	<1	0
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 0	<b>9</b>	<1	4
Zinc	ppm	ASTM D5185m 0	<b>0</b>	18	0
Sulfur	ppm	ASTM D5185m 23500	<b>21352</b>	20230	15346

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304 >0.05	<b>0.005</b>	0.009	0.003
ppm Water	ppm	ASTM D6304 >500	<b>55.8</b>	96.2	35.3

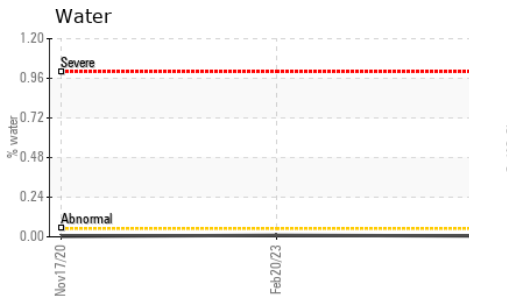
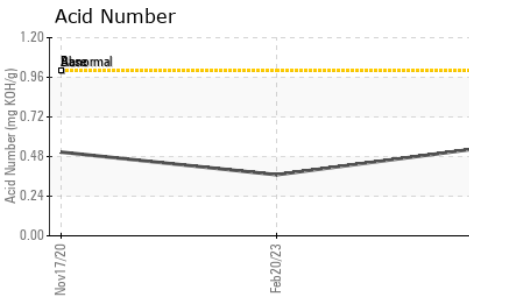
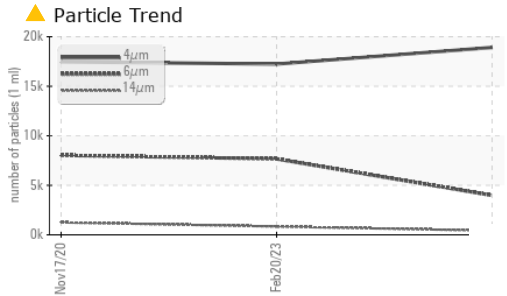
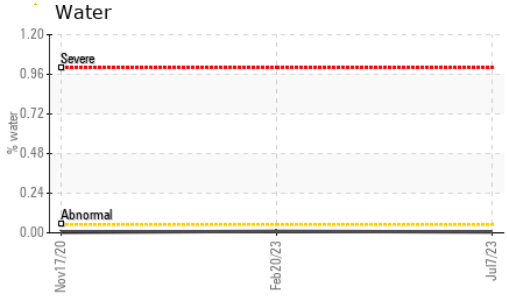
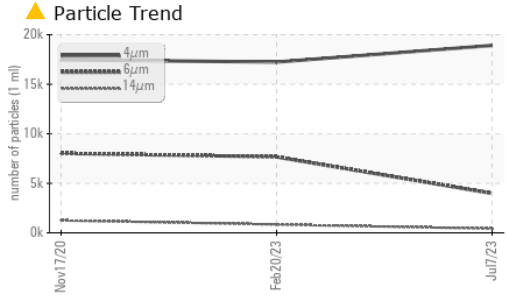
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>18914</b>	17241	17464
Particles >6µm	ASTM D7647	>1300	▲ <b>3981</b>	▲ 7665	▲ 8025
Particles >14µm	ASTM D7647	>80	▲ <b>416</b>	▲ 836	▲ 1253
Particles >21µm	ASTM D7647	>20	▲ <b>187</b>	▲ 125	▲ 362
Particles >38µm	ASTM D7647	>4	▲ <b>25</b>	4	▲ 13
Particles >71µm	ASTM D7647	>3	▲ <b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>21/19/16</b>	▲ 21/20/17	▲ 20/17

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.54</b>	0.37	0.507

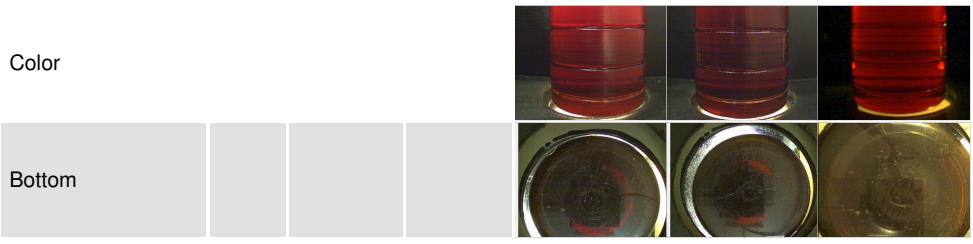
# OIL ANALYSIS REPORT



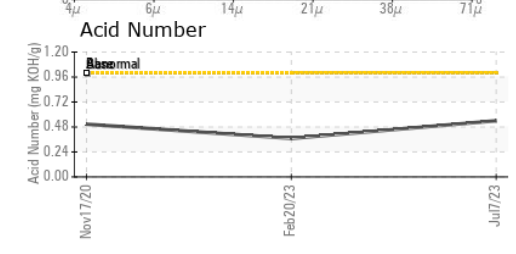
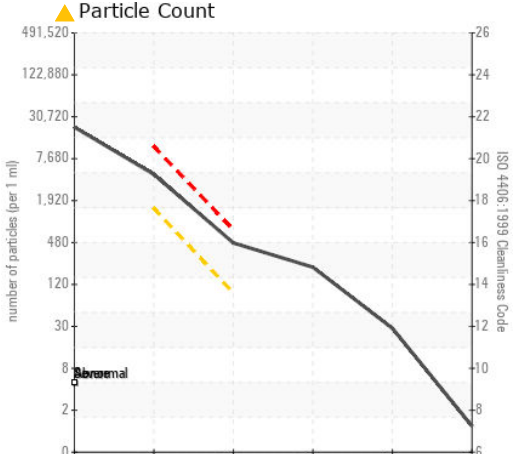
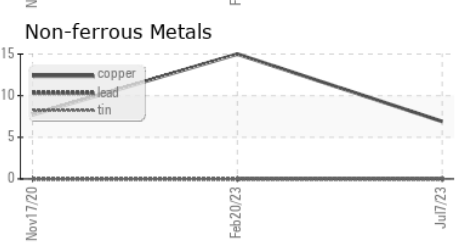
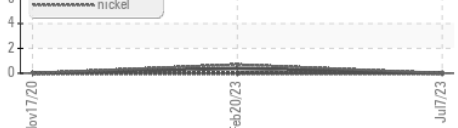
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	HEAVY	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	53.6	48.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004648 **Received** : 14 Jul 2023  
**Lab Number** : 05898646 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10560002 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CITY OF ANGELS**  
 9599 JEFFERSON BLVD  
 CULVER CITY, CA  
 US 90232  
 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)