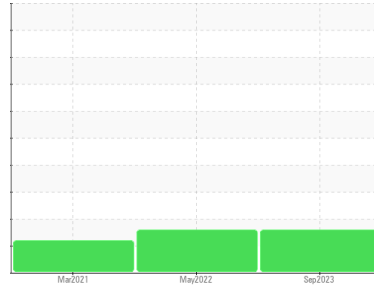




# PROBLEM SUMMARY

## Sample Rating Trend

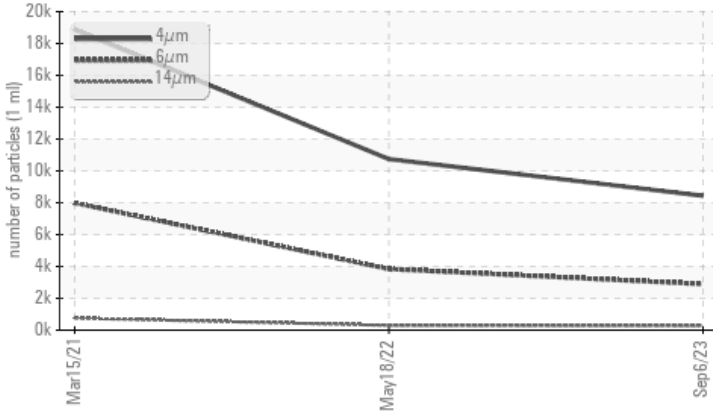


Machine Id  
**7213969 (S/N 1552)**

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

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## 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>	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>2891</b>	▲ 3835	▲ 7981
Particles >14µm	ASTM D7647	>80	▲ <b>277</b>	▲ 298	▲ 753
Particles >21µm	ASTM D7647	>20	▲ <b>77</b>	▲ 47	▲ 180
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/19/15</b>	▲ 21/19/15	▲ 20/17

Customer Id: CARHAN  
Sample No.: KCPA006080  
Lab Number: 05960631  
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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 18 May 2022 Diag: Angela Borella

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



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### 15 Mar 2021 Diag: Jonathan Hester

ISO



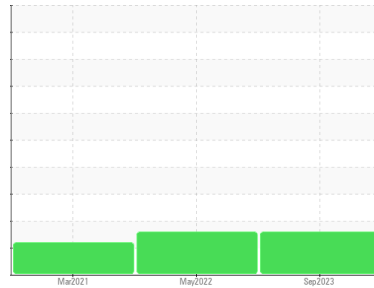
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**7213969 (S/N 1552)**

Component  
**Compressor**

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

**DIAGNOSIS**

**Recommendation**

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>KCPA006080</b>	KCP51377	KCP27727
Sample Date	Client Info			<b>06 Sep 2023</b>	18 May 2022	15 Mar 2021
Machine Age	hrs	Client Info		<b>4871</b>	3368	1612
Oil Age	hrs	Client Info		<b>0</b>	2124	1612
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>4</b>	3	1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

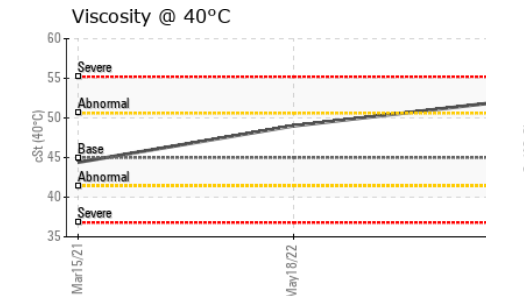
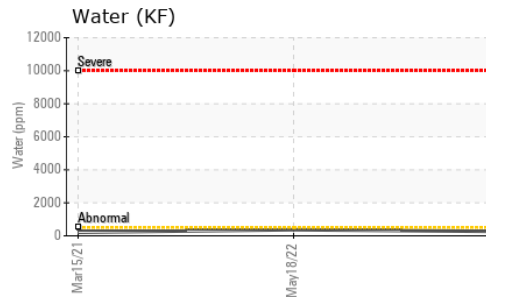
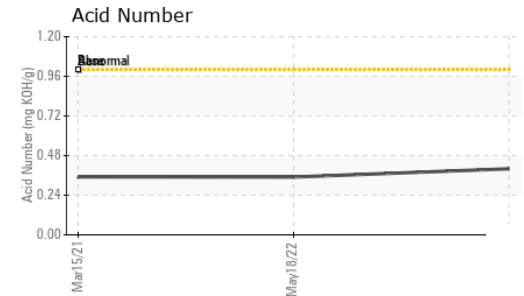
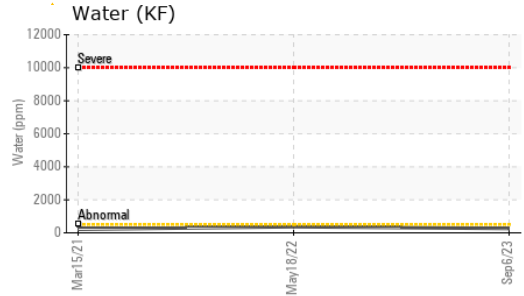
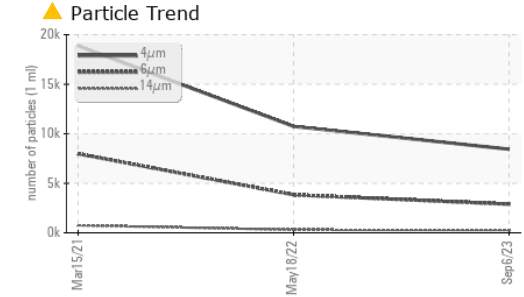
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	8
Barium	ppm	ASTM D5185m	90	<b>&lt;1</b>	<1	7
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>57</b>	76	64
Calcium	ppm	ASTM D5185m	0	<b>1</b>	0	1
Phosphorus	ppm	ASTM D5185m	0	<b>4</b>	11	3
Zinc	ppm	ASTM D5185m	0	<b>0</b>	7	3
Sulfur	ppm	ASTM D5185m	23500	<b>25689</b>	19258	13197

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>11</b>	20	15
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	<1	5
Water	%	ASTM D6304	>0.05	<b>0.026</b>	0.036	0.021
ppm Water	ppm	ASTM D6304	>500	<b>260.6</b>	369.0	213.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>8439</b>	10742	18872
Particles >6µm		ASTM D7647	>1300	<b>▲ 2891</b>	▲ 3835	▲ 7981
Particles >14µm		ASTM D7647	>80	<b>▲ 277</b>	▲ 298	▲ 753
Particles >21µm		ASTM D7647	>20	<b>▲ 77</b>	▲ 47	▲ 180
Particles >38µm		ASTM D7647	>4	<b>3</b>	1	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 20/19/15</b>	▲ 21/19/15	▲ 20/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.40</b>	0.35	0.351

# OIL ANALYSIS REPORT



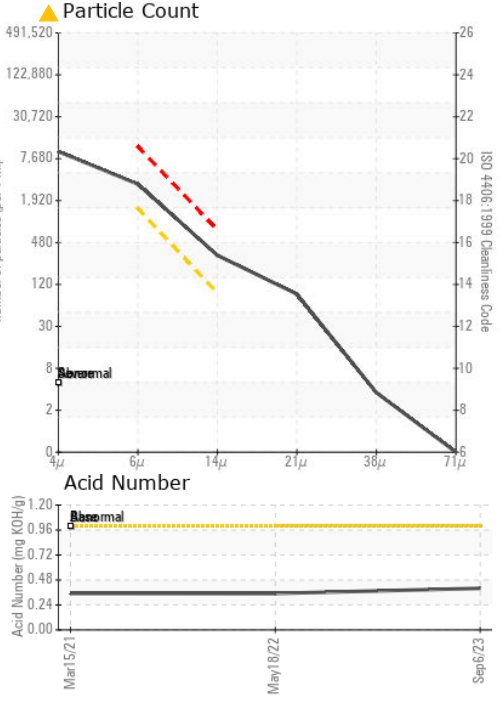
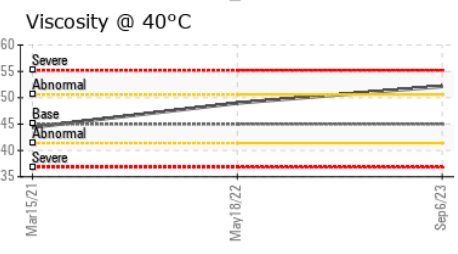
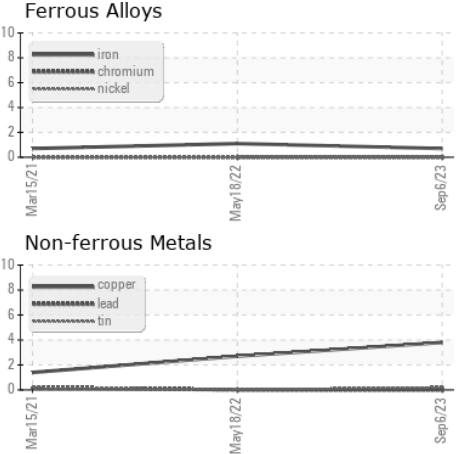
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT
Sand/Dirt	scalar	*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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	<b>52.15</b>	49.0

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color				
Bottom				

**GRAPHS**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006080 **Received** : 25 Sep 2023  
**Lab Number** : 05960631 **Diagnosed** : 29 Sep 2023  
**Unique Number** : 10661844 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CARTER LUMBER**  
 8 BARNHART DR  
 HANOVER, PA  
 US 17331  
 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: