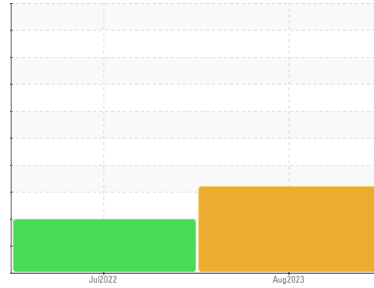




# PROBLEM SUMMARY

Sample Rating Trend

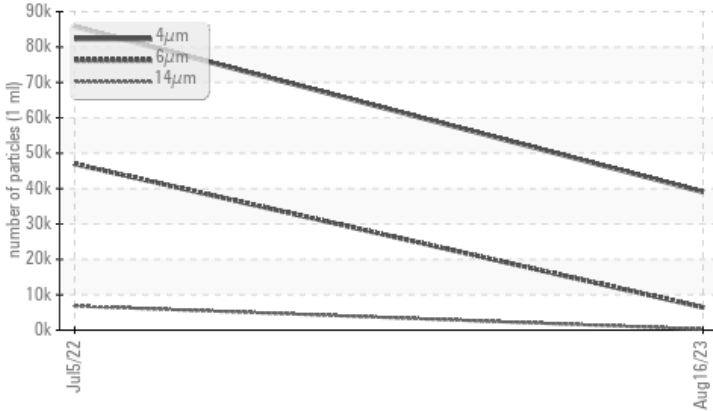


Machine Id  
**2220881 (S/N 1383)**

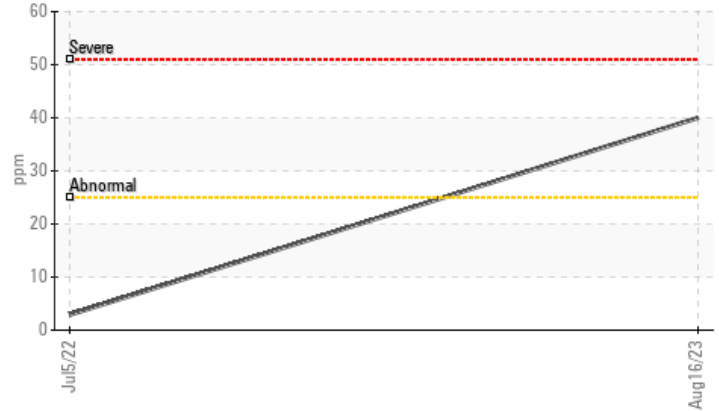
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Silicon (ppm)



## 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	---
Silicon	ppm	ASTM D5185m	>25	▲ 40	3	---
Particles >6µm		ASTM D7647	>1300	▲ 6428	▲ 46957	---
Particles >14µm		ASTM D7647	>80	▲ 278	▲ 6820	---
Particles >21µm		ASTM D7647	>20	▲ 73	▲ 1031	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 22/20/15	▲ 24/23/20	---

Customer Id: NORSAC  
Sample No.: KCPA004276  
Lab Number: 05933593  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

**05 Jul 2022 Diag: Angela Borella**

ISO



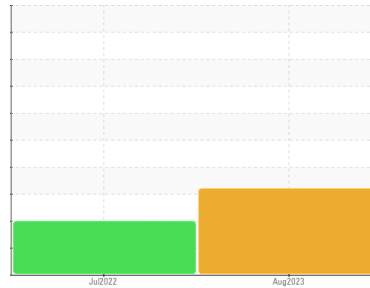
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Machine Id  
**2220881 (S/N 1383)**

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. Elemental level of silicon (Si) above normal.

**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>KCPA004276</b>	KCP51476	---
Sample Date	Client Info			<b>16 Aug 2023</b>	05 Jul 2022	---
Machine Age	hrs	Client Info		<b>0</b>	38088	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
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>0</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>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>2</b>	4	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

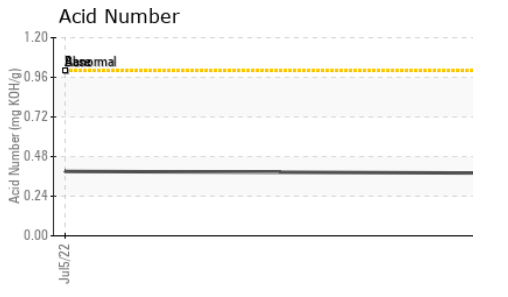
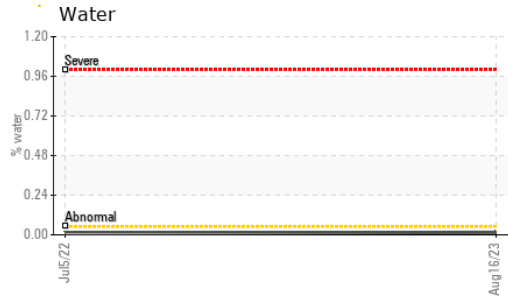
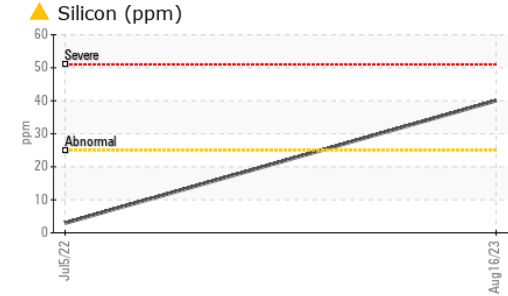
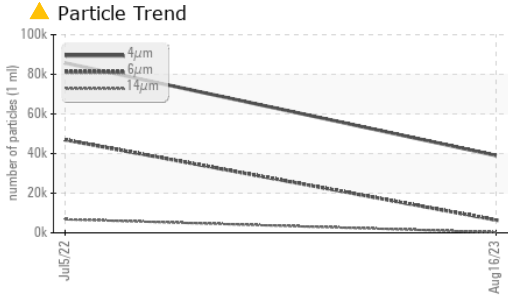
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>11</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>46</b>	4	---
Calcium	ppm	ASTM D5185m	0	<b>2</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>8</b>	27	---
Zinc	ppm	ASTM D5185m	0	<b>45</b>	16	---
Sulfur	ppm	ASTM D5185m	23500	<b>21028</b>	17235	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>▲ 40</b>	3	---
Sodium	ppm	ASTM D5185m		<b>2</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	---
Water	%	ASTM D6304	>0.05	<b>0.015</b>	0.010	---
ppm Water	ppm	ASTM D6304	>500	<b>157.7</b>	104.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>39026</b>	85750	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 6428</b>	▲ 46957	---
Particles >14µm		ASTM D7647	>80	<b>▲ 278</b>	▲ 6820	---
Particles >21µm		ASTM D7647	>20	<b>▲ 73</b>	▲ 1031	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	▲ 17	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 22/20/15</b>	▲ 24/23/20	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.38</b>	0.39	---

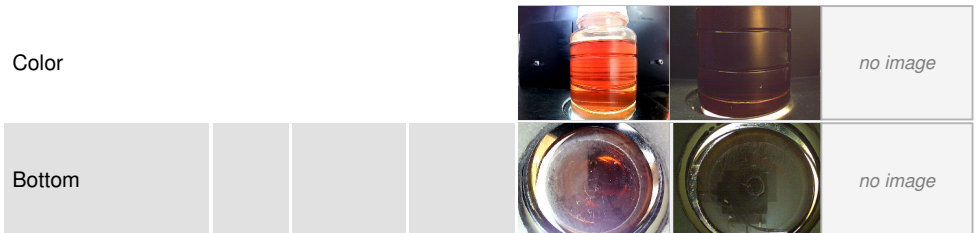
# OIL ANALYSIS REPORT



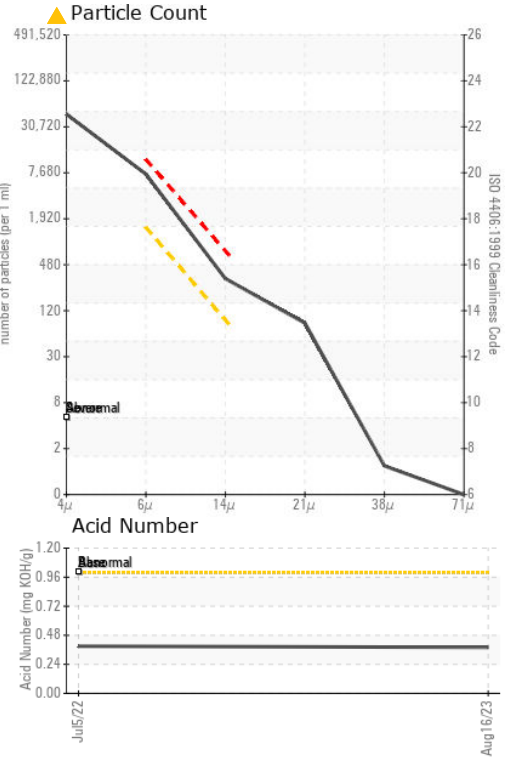
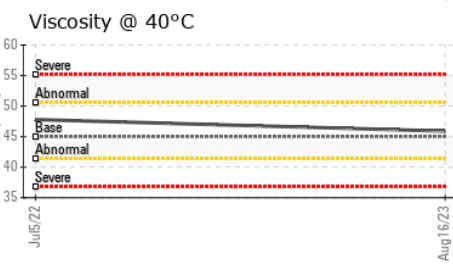
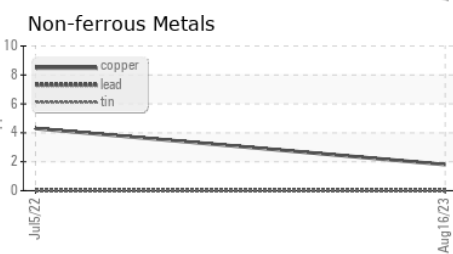
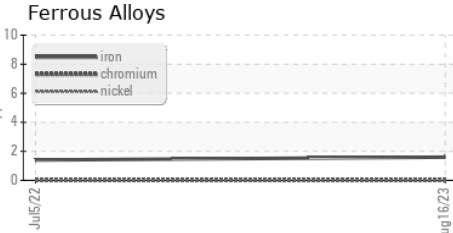
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	45	45.9	47.8

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA004276 **Received** : 24 Aug 2023  
**Lab Number** : 05933593 **Diagnosed** : 25 Aug 2023  
**Unique Number** : 10618864 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NORCAL SOLUTIONS INC**  
 2572 PORT ST  
 SACRAMENTO, CA  
 US 95691  
 Contact: A/P  
 ap@ncsallieddoors.com  
 T:  
 F:

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)