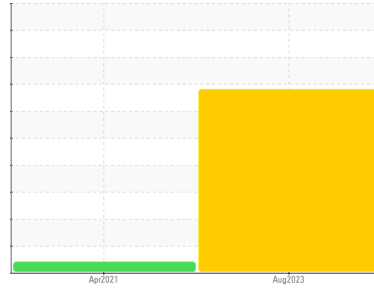


PROBLEM SUMMARY

Sample Rating Trend



DIRT



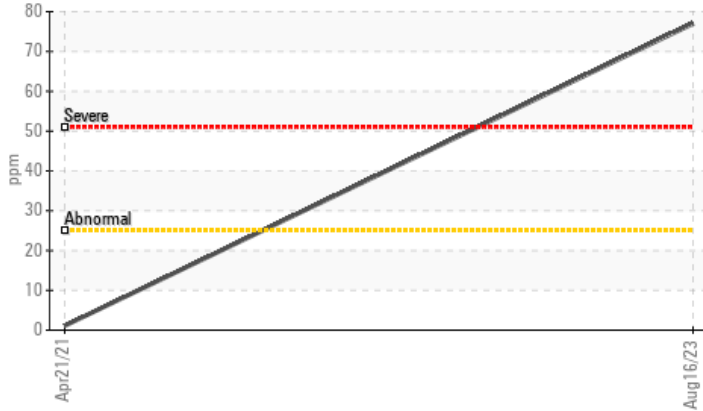
Machine Id
1582567 (S/N 1657)

Component
Compressor

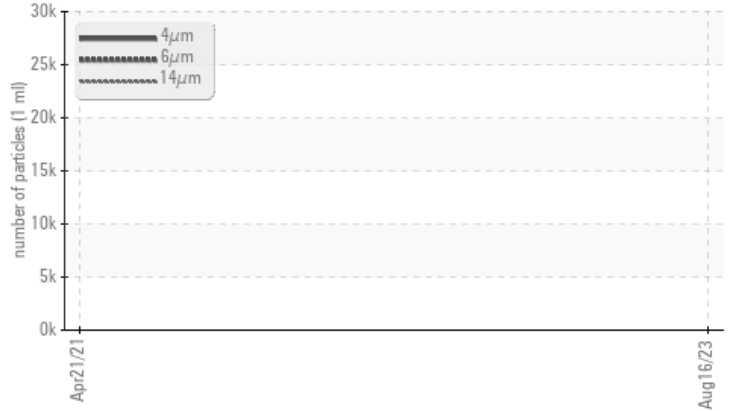
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

● Silicon (ppm)



▲ Particle Trend



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	---
Silicon	ppm	ASTM D5185m >25	● 77	1	---
Particles >6µm		ASTM D7647 >1300	▲ 11218	---	---
Particles >14µm		ASTM D7647 >80	▲ 1295	---	---
Particles >21µm		ASTM D7647 >20	▲ 342	---	---
Particles >38µm		ASTM D7647 >4	▲ 9	---	---
Oil Cleanliness		ISO 4406 (c) >--/17/13	▲ 22/21/17	---	---

Customer Id: NORSAC
Sample No.: KCPA004336
Lab Number: 05933594
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

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

21 Apr 2021 Diag: Jonathan Hester

VIS DEBRIS



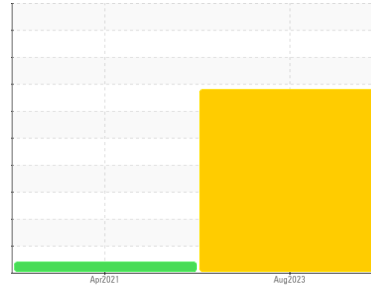
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris 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



DIRT



Machine Id
1582567 (S/N 1657)

Component

Compressor

Fluid

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

DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA004336	KCP31503	---
Sample Date	Client Info		16 Aug 2023	21 Apr 2021	---
Machine Age	hrs	Client Info	33439	29378	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			SEVERE	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	1	10	---
Chromium	ppm	ASTM D5185m >10	0	0	---
Nickel	ppm	ASTM D5185m >3	0	0	---
Titanium	ppm	ASTM D5185m >3	0	0	---
Silver	ppm	ASTM D5185m >2	0	<1	---
Aluminum	ppm	ASTM D5185m >10	0	7	---
Lead	ppm	ASTM D5185m >10	0	0	---
Copper	ppm	ASTM D5185m >50	4	6	---
Tin	ppm	ASTM D5185m >10	0	<1	---
Antimony	ppm	ASTM D5185m	---	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	7	---
Barium	ppm	ASTM D5185m 90	2	0	---
Molybdenum	ppm	ASTM D5185m 0	0	0	---
Manganese	ppm	ASTM D5185m	0	<1	---
Magnesium	ppm	ASTM D5185m 100	8	5	---
Calcium	ppm	ASTM D5185m 0	0	0	---
Phosphorus	ppm	ASTM D5185m 0	40	56	---
Zinc	ppm	ASTM D5185m 0	37	93	---
Sulfur	ppm	ASTM D5185m 23500	16676	13965	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	77	1	---
Sodium	ppm	ASTM D5185m	0	5	---
Potassium	ppm	ASTM D5185m >20	<1	0	---
Water	%	ASTM D6304 >0.05	0.004	0.012	---
ppm Water	ppm	ASTM D6304 >500	42.5	128.9	---

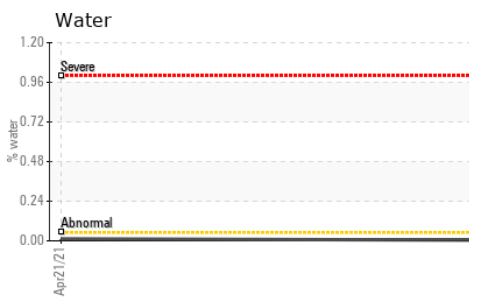
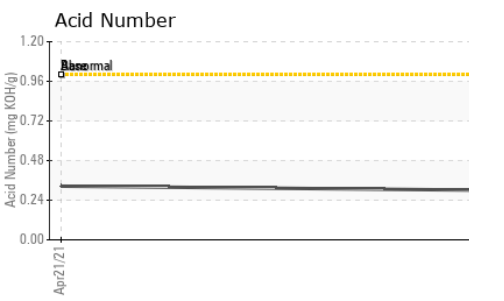
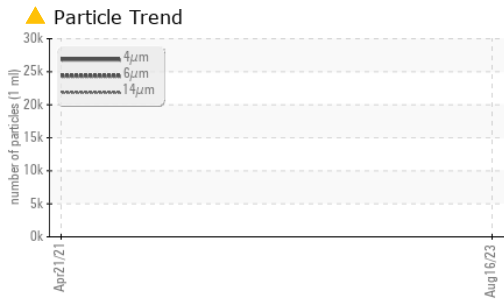
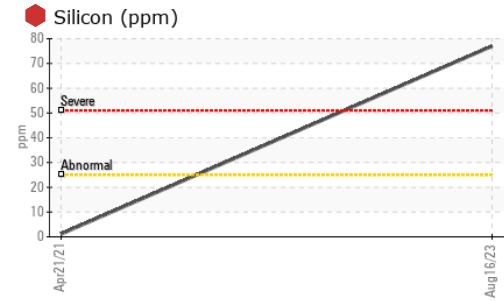
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		29685	---	---
Particles >6µm	ASTM D7647	>1300	11218	---	---
Particles >14µm	ASTM D7647	>80	1295	---	---
Particles >21µm	ASTM D7647	>20	342	---	---
Particles >38µm	ASTM D7647	>4	9	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	22/21/17	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.30	0.325	---

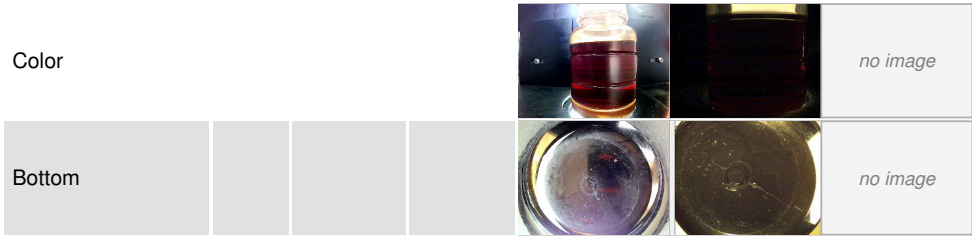
OIL ANALYSIS REPORT



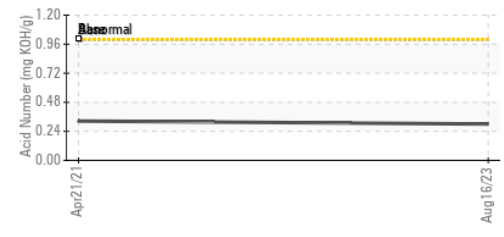
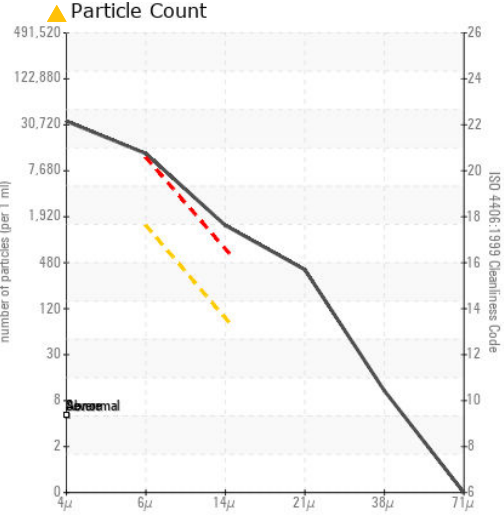
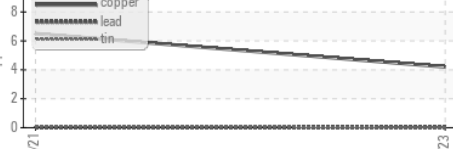
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	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	46.8	46.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004336 **Received** : 24 Aug 2023
Lab Number : 05933594 **Diagnosed** : 25 Aug 2023
Unique Number : 10618865 **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

Certificate L2367
 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)