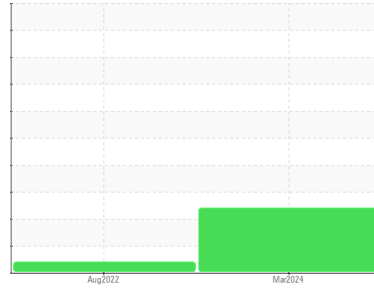




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER 2874724 (S/N 1092)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of visible silt present in the sample. There is a light concentration of water 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		KCPA016861	KCP50315	---
Sample Date	Client Info		27 Mar 2024	30 Aug 2022	---
Machine Age	hrs	Client Info	27824	24714	---
Oil Age	hrs	Client Info	3110	2500	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	ATTENTION	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	---
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	<1	1	---
Lead	ppm	ASTM D5185m >10	0	<1	---
Copper	ppm	ASTM D5185m >50	4	6	---
Tin	ppm	ASTM D5185m >10	1	<1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	---
Barium	ppm	ASTM D5185m 90	1	0	---
Molybdenum	ppm	ASTM D5185m 0	0	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m 100	18	10	---
Calcium	ppm	ASTM D5185m 0	<1	0	---
Phosphorus	ppm	ASTM D5185m 0	2	2	---
Zinc	ppm	ASTM D5185m 0	22	26	---
Sulfur	ppm	ASTM D5185m 23500	22764	20723	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	1	---
Sodium	ppm	ASTM D5185m	5	0	---
Potassium	ppm	ASTM D5185m >20	<1	2	---
Water	%	ASTM D6304 >0.05	▲ 0.174	0.011	---
ppm Water	ppm	ASTM D6304 >500	▲ 1742	118.7	---

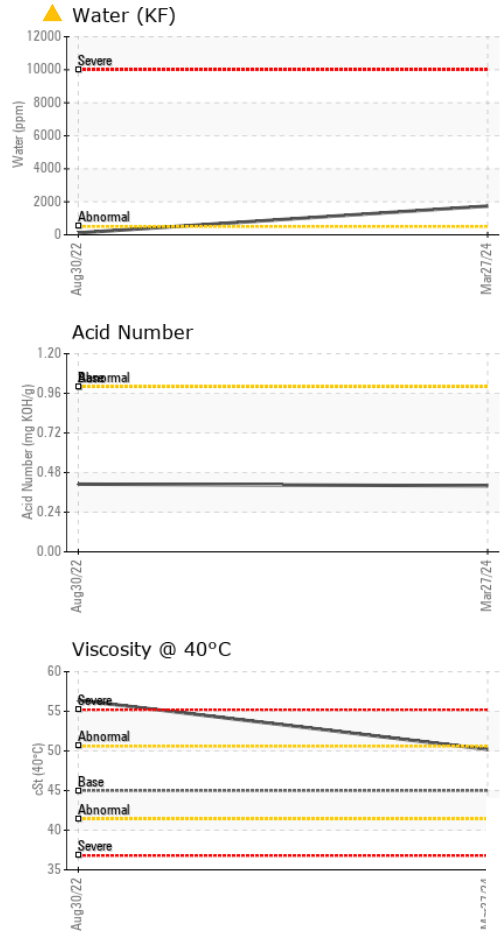
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	2098	---
Particles >6µm	ASTM D7647	>1300	---	529	---
Particles >14µm	ASTM D7647	>80	---	26	---
Particles >21µm	ASTM D7647	>20	---	3	---
Particles >38µm	ASTM D7647	>4	---	0	---
Particles >71µm	ASTM D7647	>3	---	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	18/16/12	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.40	0.41	---

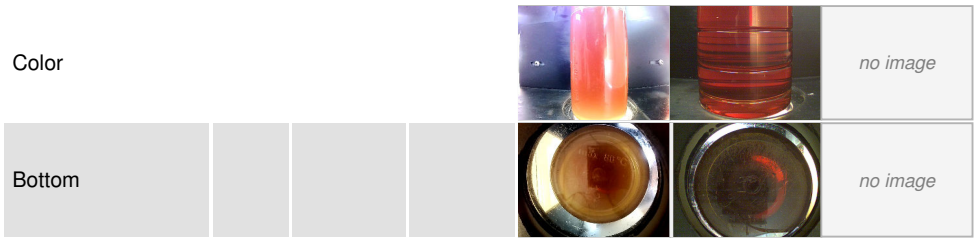
OIL ANALYSIS REPORT



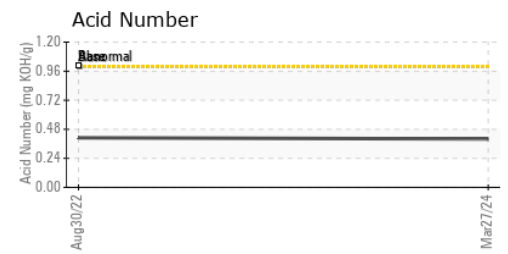
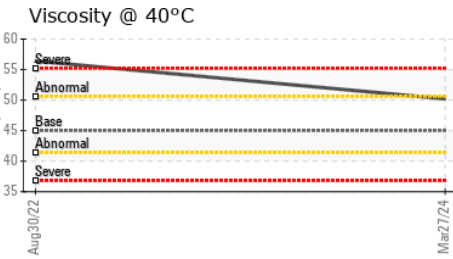
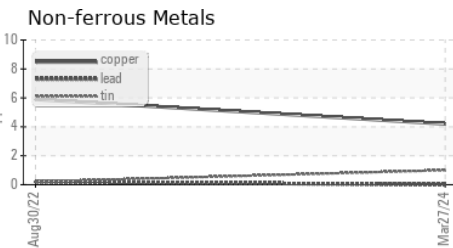
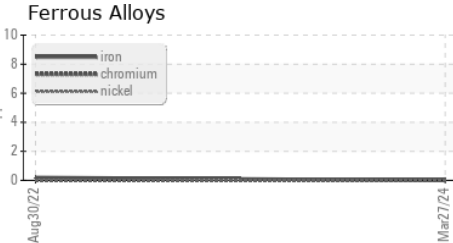
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	▲ MODER	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	50.2	● 56.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016861 **Received** : 02 Apr 2024
Lab Number : 06136902 **Tested** : 09 Apr 2024
Unique Number : 10956367 **Diagnosed** : 09 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SHOTWELL'S AUTO BODY
 213 CINNABAR AVE
 PETALUMA, CA
 US 94952
 Contact: Service Manager
 shotwells@comcast.net

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)