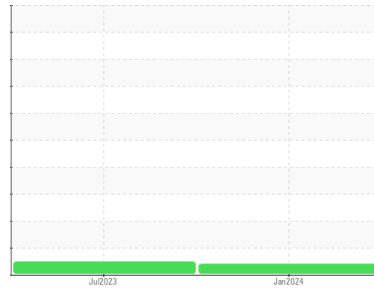




OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
KAESER CSD 100S 8734478 (S/N 1179)
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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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		KC127609	KC111414	---
Sample Date	Client Info		30 Jan 2024	11 Jul 2023	---
Machine Age	hrs	Client Info	7660	3595	---
Oil Age	hrs	Client Info	0	1365	---
Oil Changed	Client Info		N/A	Not Changd	---
Sample Status			ABNORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	0	---
Chromium	ppm	ASTM D5185m >10	<1	0	---
Nickel	ppm	ASTM D5185m >3	0	0	---
Titanium	ppm	ASTM D5185m >3	<1	0	---
Silver	ppm	ASTM D5185m >2	<1	0	---
Aluminum	ppm	ASTM D5185m >10	2	<1	---
Lead	ppm	ASTM D5185m >10	<1	0	---
Copper	ppm	ASTM D5185m >50	10	3	---
Tin	ppm	ASTM D5185m >10	<1	0	---
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	<1	---
Magnesium	ppm	ASTM D5185m 100	3	4	---
Calcium	ppm	ASTM D5185m 0	4	0	---
Phosphorus	ppm	ASTM D5185m 0	1	0	---
Zinc	ppm	ASTM D5185m 0	<1	0	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	1	---
Sodium	ppm	ASTM D5185m	0	6	---
Potassium	ppm	ASTM D5185m >20	2	4	---
Water	%	ASTM D6304 >0.05	0.006	0.018	---
ppm Water	ppm	ASTM D6304 >500	63	181.5	---

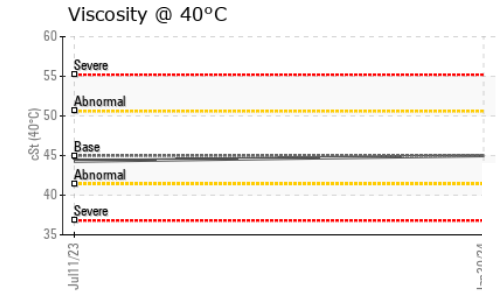
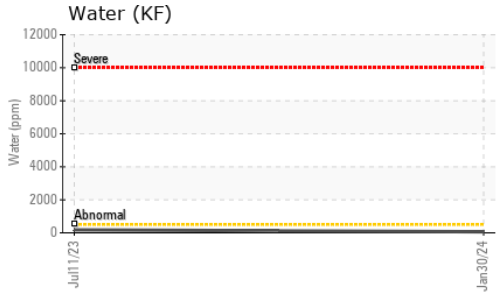
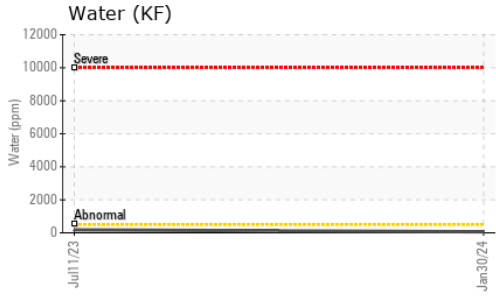
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	2708	---
Particles >6µm	ASTM D7647	>1300	---	602	---
Particles >14µm	ASTM D7647	>80	---	68	---
Particles >21µm	ASTM D7647	>20	---	20	---
Particles >38µm	ASTM D7647	>4	---	0	---
Particles >71µm	ASTM D7647	>3	---	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	19/16/13	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.44	0.37	---

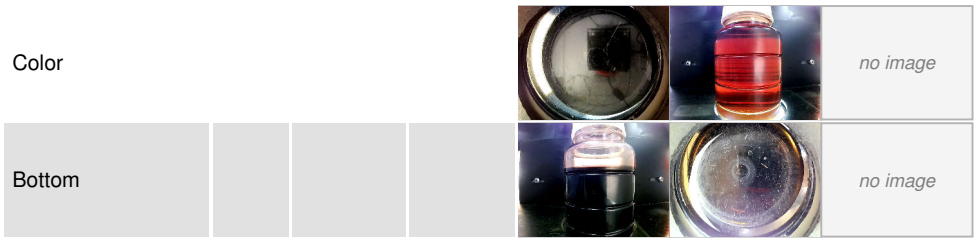
OIL ANALYSIS REPORT



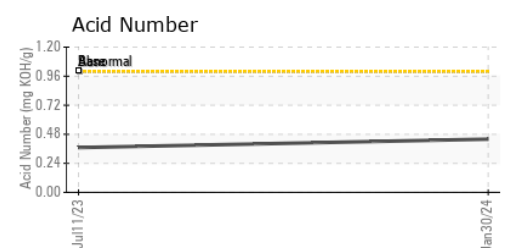
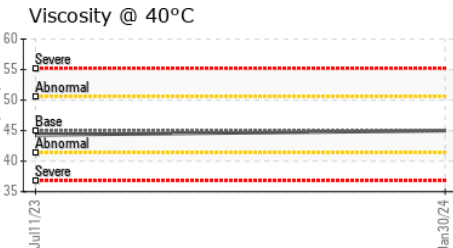
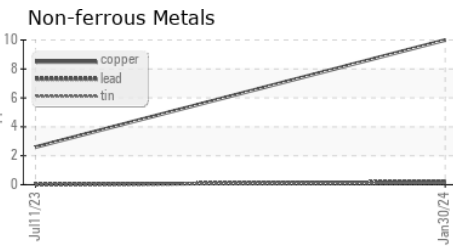
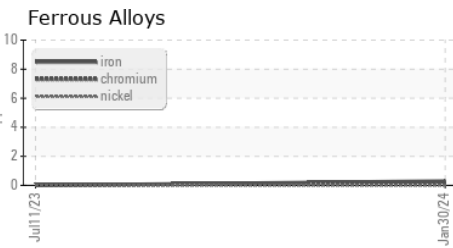
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---
Sand/Dirt	scalar	*Visual	NONE	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	45.0	44.3	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC127609
Lab Number : **06142227**
Unique Number : 10967035
Test Package : IND 2
Received : 08 Apr 2024
Tested : 11 Apr 2024
Diagnosed : 11 Apr 2024 - Don Baldrige

TRONAIR INC
 1 AIR CARGO PKWY E
 SWANTON, OH
 US 43558
 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)