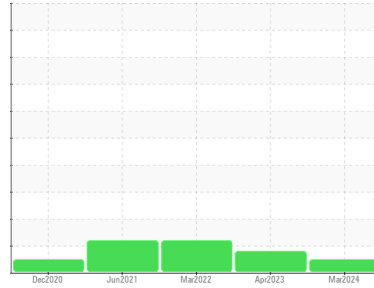




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
KAESER CSD 100S 7202805 (S/N 1025)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCP54904	KCP54878	KCP41811
Sample Date	Client Info		13 Mar 2024	11 Apr 2023	17 Mar 2022
Machine Age	hrs	Client Info	13594	11575	8369
Oil Age	hrs	Client Info	1852	3206	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	0	0
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	<1	<1
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	8	10	13
Tin	ppm	ASTM D5185m >10	1	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m 100	6	2	0
Calcium	ppm	ASTM D5185m 0	3	<1	0
Phosphorus	ppm	ASTM D5185m 0	0	5	2
Zinc	ppm	ASTM D5185m 0	40	10	0
Sulfur	ppm	ASTM D5185m 23500	22902	22406	15127

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	1	<1	<1
Sodium	ppm	ASTM D5185m	<1	0	0
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.05	0.006	0.010	0.004
ppm Water	ppm	ASTM D6304 >500	63	105.5	41.4

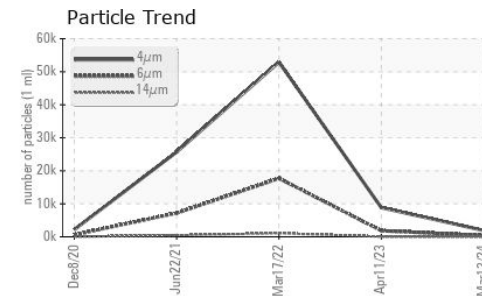
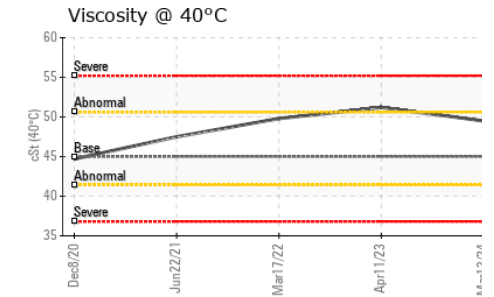
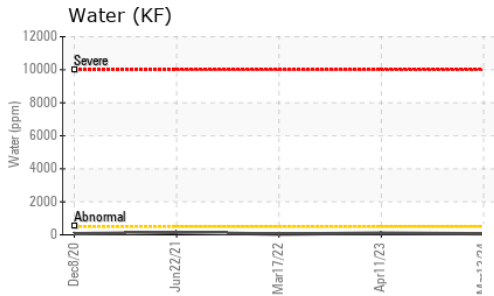
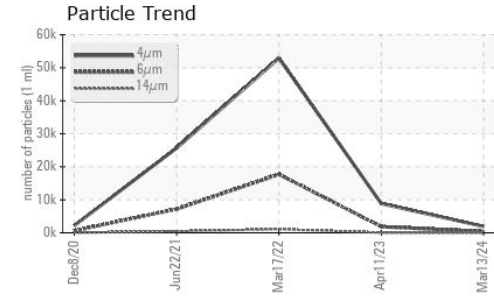
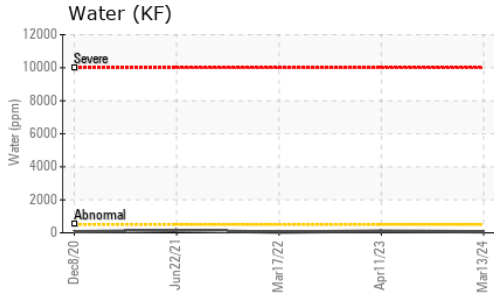
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		1922	8843	52904
Particles >6µm	ASTM D7647	>1300	389	1853	17717
Particles >14µm	ASTM D7647	>80	17	39	1091
Particles >21µm	ASTM D7647	>20	5	7	154
Particles >38µm	ASTM D7647	>4	0	0	4
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	18/16/11	20/18/12	21/17

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.47	0.44	0.44

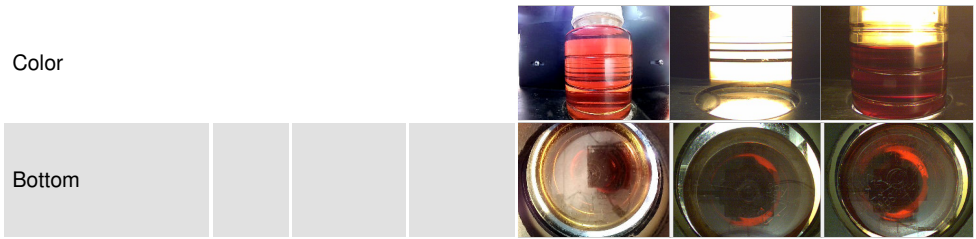
OIL ANALYSIS REPORT



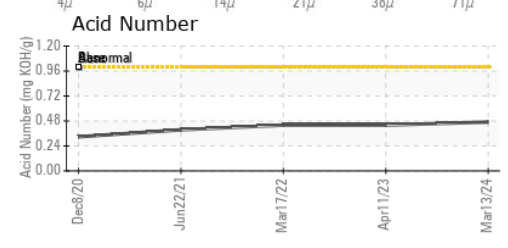
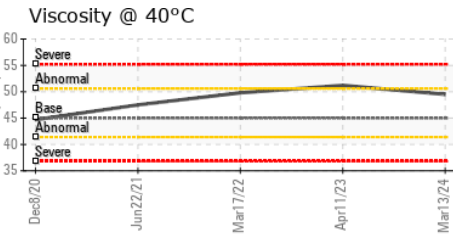
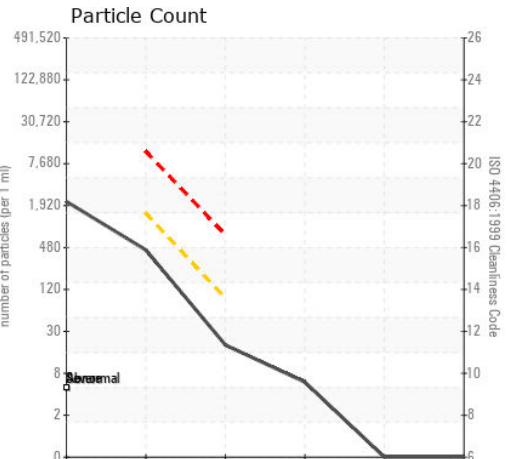
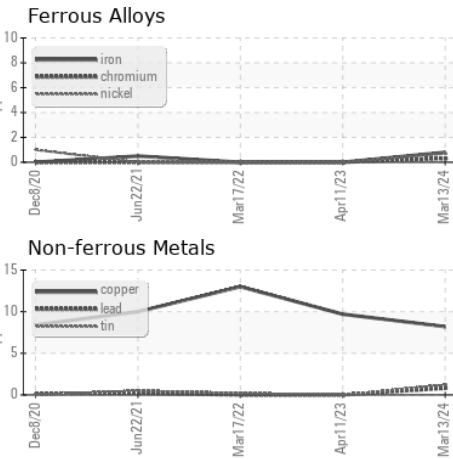
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	49.5	51.2	49.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP54904 **Received** : 01 Apr 2024
Lab Number : 06135692 **Tested** : 03 Apr 2024
Unique Number : 10955157 **Diagnosed** : 03 Apr 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ARTELYE MARBLE
 10116 BACON DR
 BELTSVILLE, MD
 US 20705
 Contact: MECHANIC
 mechanic@artelye.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)