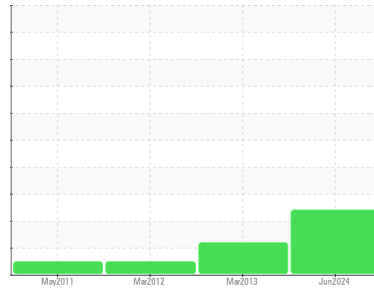




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER CSD 100T 3931969 (S/N 1083)
 Component
Compressor
 Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (--- LTR)

DIAGNOSIS

Recommendation

We advise that you stop the unit and follow the water drain-off procedure for this component. 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 silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KC06235965	KC33437	KC30219
Sample Date	Client Info		26 Jun 2024	13 Mar 2013	23 Mar 2012
Machine Age	hrs	Client Info	82373	15379	8300
Oil Age	hrs	Client Info	9766	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			ABNORMAL	MARGINAL	MARGINAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	13	0	0
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m	0	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >15	2	0	0
Lead	ppm	ASTM D5185m >65	0	0	<1
Copper	ppm	ASTM D5185m >65	2	6	6
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	2	<1	0
Barium	ppm	ASTM D5185m 500	467	0	0
Molybdenum	ppm	ASTM D5185m 0	0	<1	<1
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 0	0	0	0
Calcium	ppm	ASTM D5185m 0	0	0	0
Phosphorus	ppm	ASTM D5185m 20	224	0	0
Zinc	ppm	ASTM D5185m 0	39	0	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	1	<1	<1
Sodium	ppm	ASTM D5185m	60	<1	<1
Potassium	ppm	ASTM D5185m >20	11	<1	0
Water	%	ASTM D6304 >0.1	▲ 0.424	0.008	0.004
ppm Water	ppm	ASTM D6304 >1000	▲ 4244	80	40

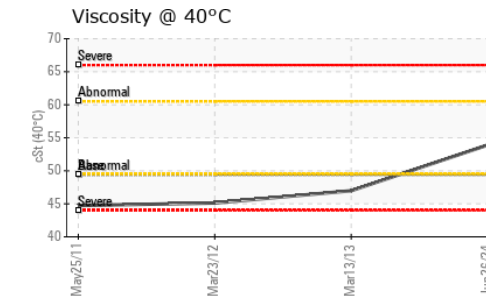
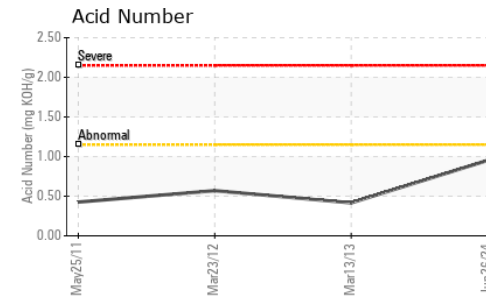
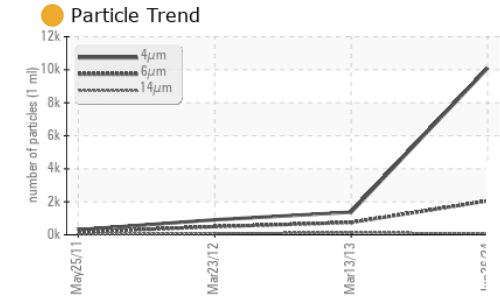
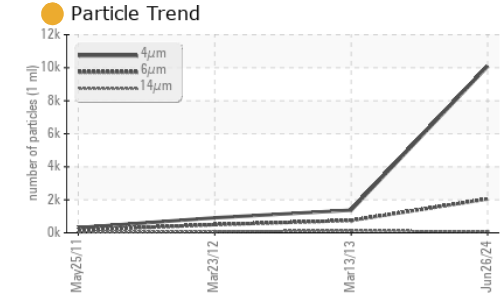
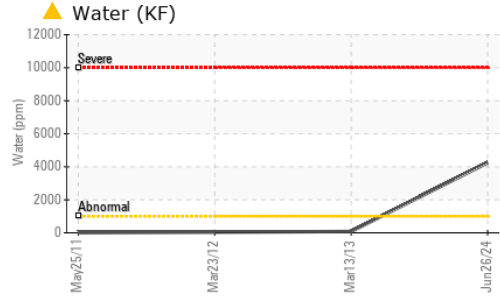
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		10085	1371	910
Particles >6µm	ASTM D7647 >1300		● 2050	747	495
Particles >14µm	ASTM D7647 >80		80	▲ 127	▲ 84
Particles >21µm	ASTM D7647 >20		14	▲ 42	▲ 28
Particles >38µm	ASTM D7647 >4		1	▲ 6	4
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		● 21/18/13	▲ 17/14	▲ 16/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.952	0.416	0.570

OIL ANALYSIS REPORT

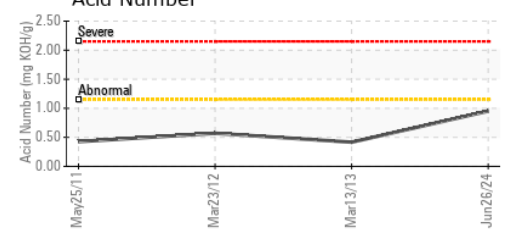
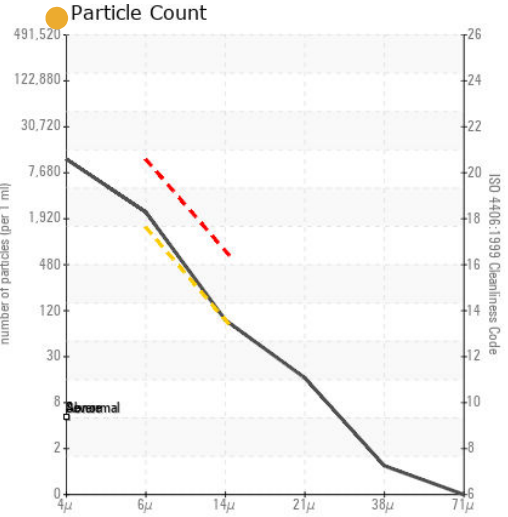
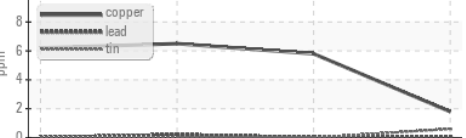
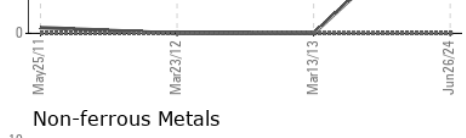


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	49.4	53.9	46.98	45.12

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC06235965
Lab Number : 06235965
Unique Number : 11124799
Test Package : IND 2
Received : 15 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 17 Jul 2024 - Don Baldrige

COTT BEVERAGE
 15200 TRINITY BLVD
 FT WORTH, TX
 US 76155
 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)