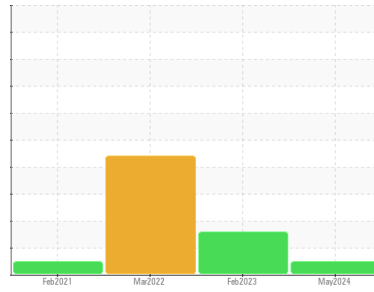




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER 4238004
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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			KCPA017536	KCP46357	KCP42102
Sample Date	Client Info			01 May 2024	21 Feb 2023	10 Mar 2022
Machine Age	hrs	Client Info		99999	92112	83860
Oil Age	hrs	Client Info		5552	8251	9641
Oil Changed	Client Info			Changed	Changed	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	<1
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	8	9	22
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

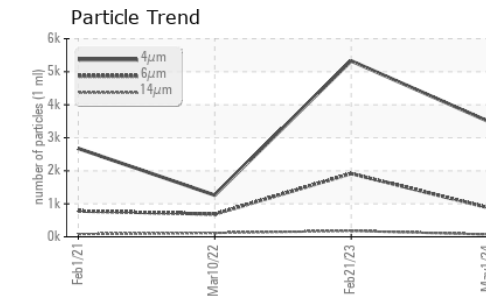
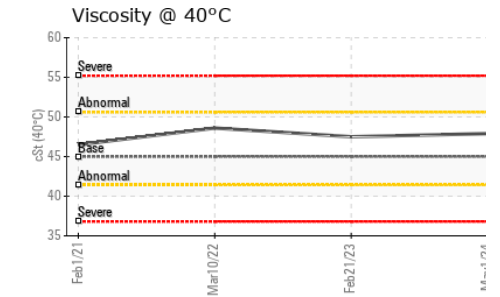
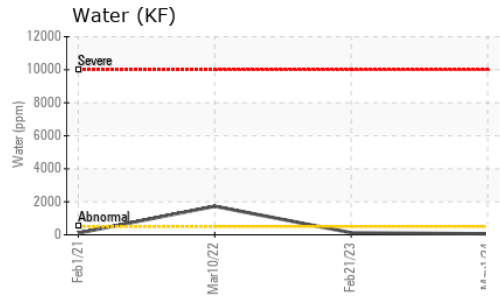
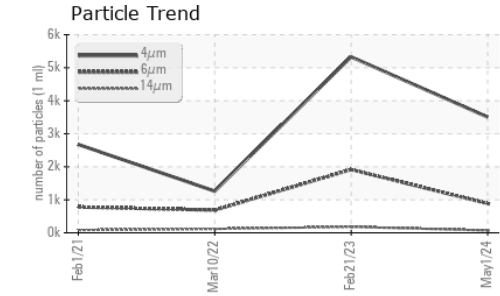
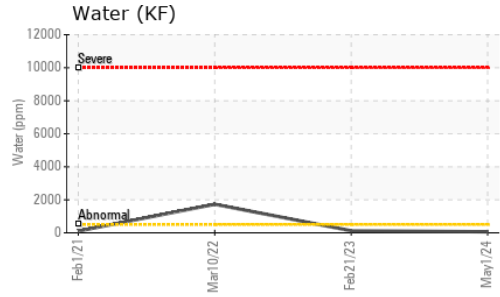
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	90	0	3	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m		0	1	0
Magnesium	ppm	ASTM D5185m	100	14	42	<1
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	0	0	0	23
Zinc	ppm	ASTM D5185m	0	70	63	18
Sulfur	ppm	ASTM D5185m	23500	23148	21144	16923

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	2	2
Sodium	ppm	ASTM D5185m		4	7	<1
Potassium	ppm	ASTM D5185m	>20	1	0	<1
Water	%	ASTM D6304	>0.05	0.006	0.012	▲ 0.173
ppm Water	ppm	ASTM D6304	>500	63	123.6	▲ 1730

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		3506	5328	1262
Particles >6µm		ASTM D7647	>1300	886	▲ 1915	687
Particles >14µm		ASTM D7647	>80	72	▲ 181	● 117
Particles >21µm		ASTM D7647	>20	21	▲ 32	● 39
Particles >38µm		ASTM D7647	>4	2	1	● 6
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>--/17/13	19/17/13	▲ 20/18/15	● 17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	0.35	0.33

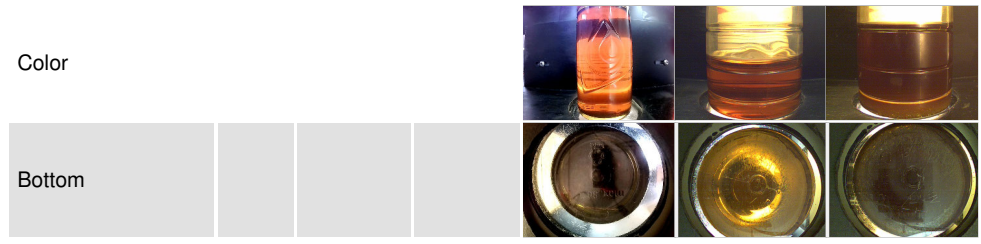
OIL ANALYSIS REPORT



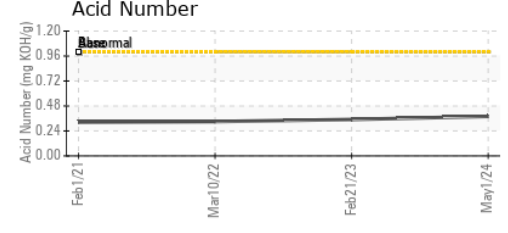
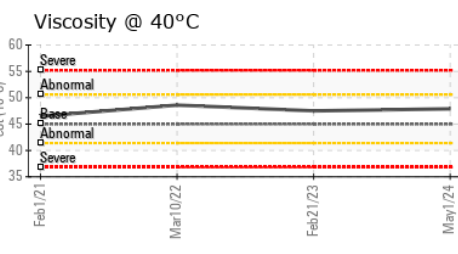
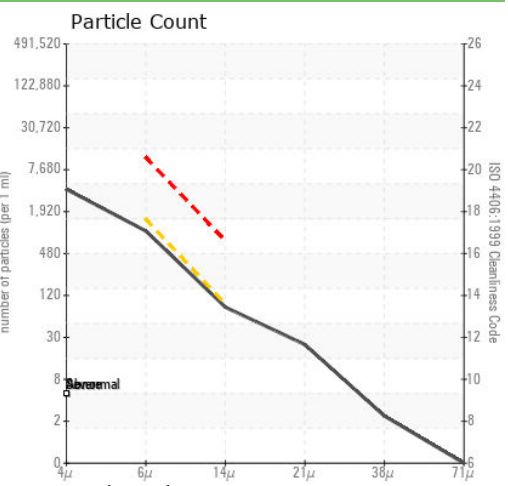
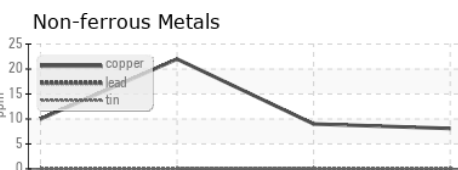
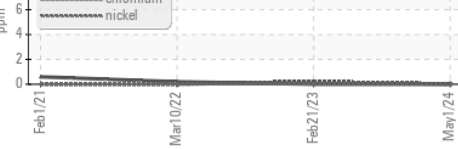
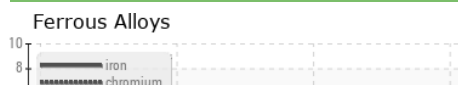
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	47.9	47.5	48.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017536
Lab Number : 06174636
Unique Number : 11020689
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 09 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Don Baldrige

CHARLES COUNTY GOVERNMENT
 12100 SWAN POINT RD
 NEWBURG, MD
 US
 Contact: MASON D.
 masond@charlescountymd.gov

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)