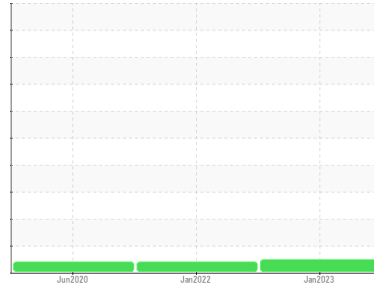




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
KAESER 4042758 (S/N 1001)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-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			KCP46599D	KCP43399	KCP22842
Sample Date	Client Info			27 Jan 2023	03 Jan 2022	11 Jun 2020
Machine Age	hrs	Client Info		14058	12081	8681
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	12	11	9
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

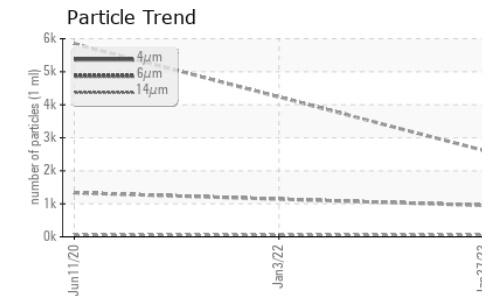
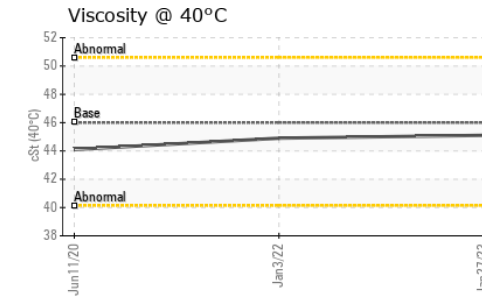
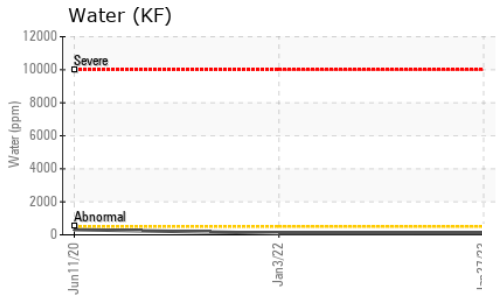
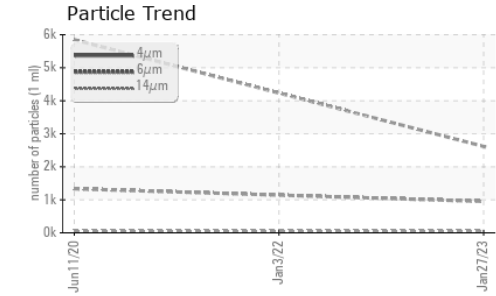
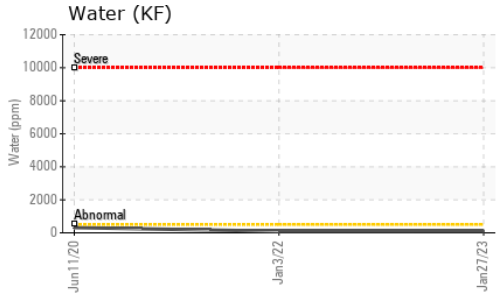
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	1
Barium	ppm	ASTM D5185m	90	0	<1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	52	40	59
Calcium	ppm	ASTM D5185m	2	2	<1	1
Phosphorus	ppm	ASTM D5185m		5	8	7
Zinc	ppm	ASTM D5185m		21	25	3
Sulfur	ppm	ASTM D5185m		19367	16449	16871

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	<1	3
Sodium	ppm	ASTM D5185m		21	18	23
Potassium	ppm	ASTM D5185m	>20	3	0	2
Water	%	ASTM D6304	>0.05	0.010	0.009	0.031
ppm Water	ppm	ASTM D6304	>500	101.2	94.4	318.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2616	---	5849
Particles >6µm		ASTM D7647	>1300	951	---	▲ 1334
Particles >14µm		ASTM D7647	>80	56	---	53
Particles >21µm		ASTM D7647	>20	9	---	10
Particles >38µm		ASTM D7647	>4	0	---	1
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	19/17/13	---	▲ 18/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.30	0.34	0.329

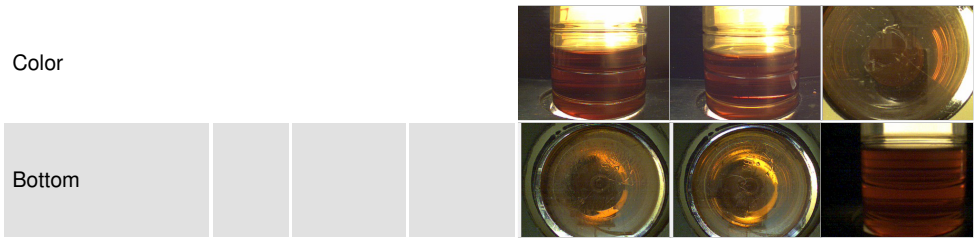
OIL ANALYSIS REPORT



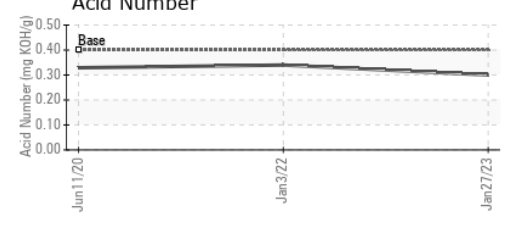
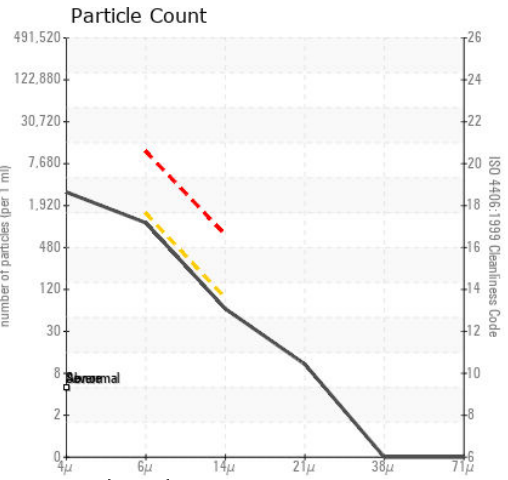
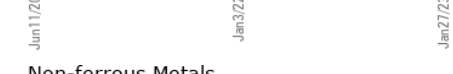
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	45.1	44.9	44.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP46599D **Received** : 10 Feb 2023
Lab Number : 05765152 **Tested** : 13 Feb 2023
Unique Number : 10334760 **Diagnosed** : 14 Feb 2023 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BRANDYWINE COACH WORKS
 1209 BALTIMORE PIKE
 CHADDSFORD, PA
 US 19317
 Contact: E. LECHETTE
 elechette@brandywinecoachworks.com

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)