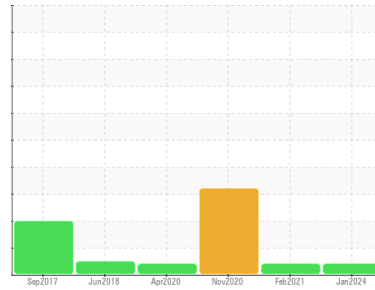




OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
KAESER BSD 50 5386837 (S/N 1027)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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			KCPA004748	KCP30735	KCP34084
Sample Date	Client Info			31 Jan 2024	15 Feb 2021	23 Nov 2020
Machine Age	hrs	Client Info		5330	7366	7288
Oil Age	hrs	Client Info		0	300	185
Oil Changed	Client Info			N/A	Changed	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	<1	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	4	2	3
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

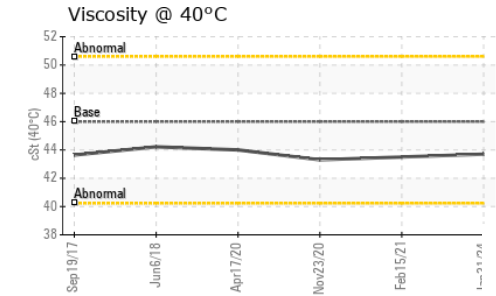
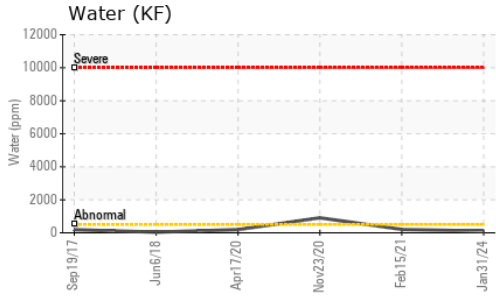
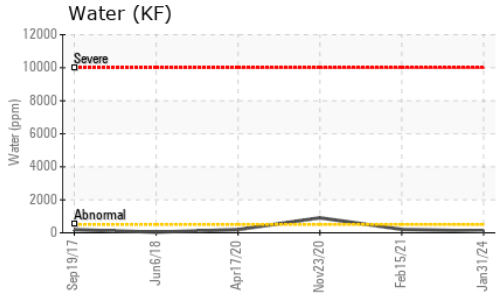
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	11	12
Barium	ppm	ASTM D5185m	90	2	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	13	36	36
Calcium	ppm	ASTM D5185m	2	4	<1	<1
Phosphorus	ppm	ASTM D5185m		<1	5	3
Zinc	ppm	ASTM D5185m		32	25	27
Sulfur	ppm	ASTM D5185m		20558	17047	17269

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	<1
Sodium	ppm	ASTM D5185m		49	55	40
Potassium	ppm	ASTM D5185m	>20	12	11	9
Water	%	ASTM D6304	>0.05	0.010	0.020	▲ 0.091
ppm Water	ppm	ASTM D6304	>500	103	206.7	▲ 910

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	---	231
Particles >6µm		ASTM D7647	>1300	---	---	126
Particles >14µm		ASTM D7647	>80	---	---	21
Particles >21µm		ASTM D7647	>20	---	---	7
Particles >38µm		ASTM D7647	>4	---	---	1
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	---	14/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.22	0.215	0.254

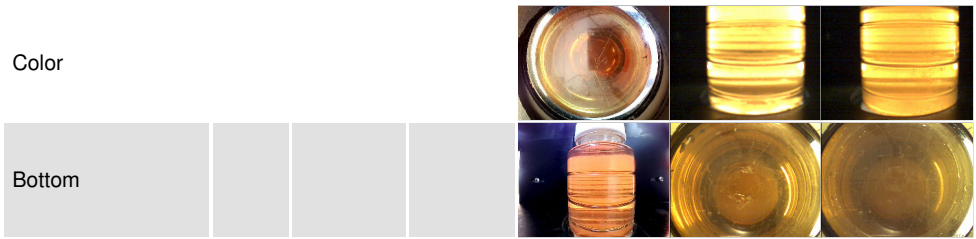
OIL ANALYSIS REPORT



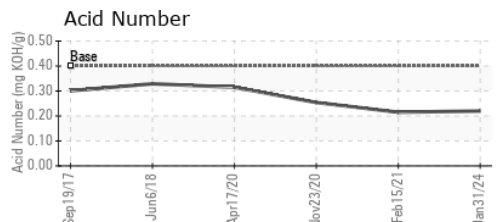
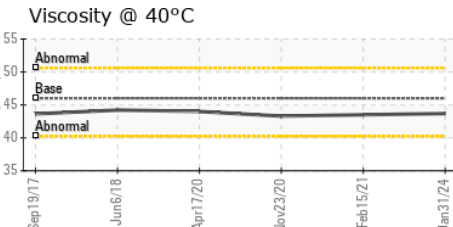
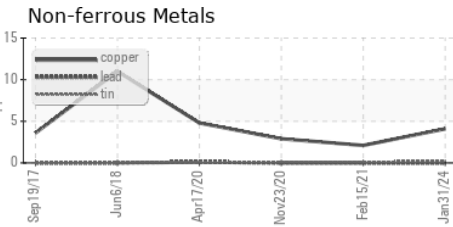
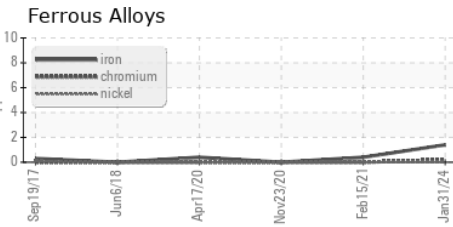
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.7	43.5	43.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004748 **Received** : 08 Apr 2024
Lab Number : 06142257 **Tested** : 11 Apr 2024
Unique Number : 10967065 **Diagnosed** : 11 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

KROGER DISTRIBUTION
 2000 ANVIL BLOCK RD
 FOREST PARK, GA
 US 30297
 Contact: ERIC MCCOY
 eric.mccoy@bgdcdistribution.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)