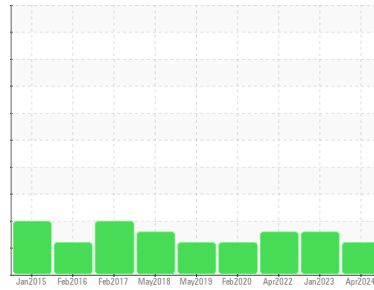




OIL ANALYSIS REPORT

Sample Rating Trend



SEDIMENT



Machine Id
KAESER SK 19 1420229 (S/N 01810118)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-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

There is a moderate amount of visible silt present in the sample. 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			KCPA017159	KCP55607	KCP45313
Sample Date	Client Info			02 Apr 2024	20 Jan 2023	04 Apr 2022
Machine Age	hrs	Client Info		88092	83017	78753
Oil Age	hrs	Client Info		4000	4264	0
Oil Changed	Client Info			Not Chngd	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

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

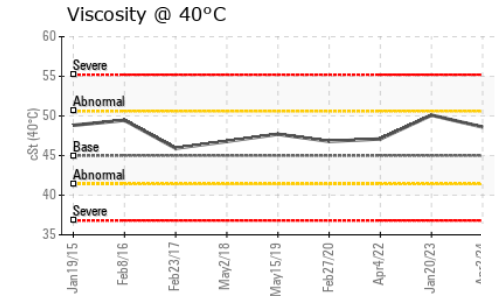
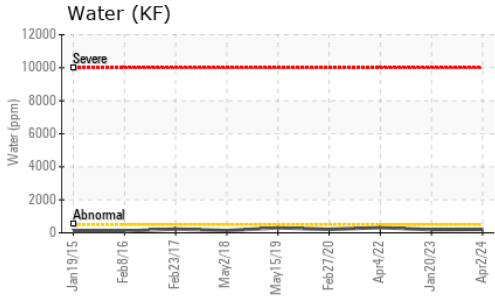
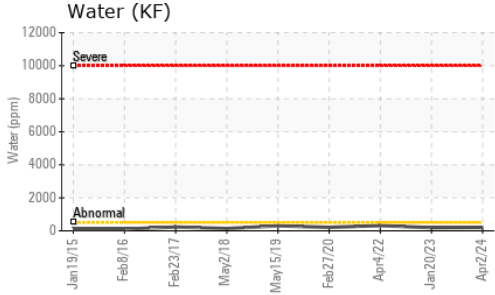
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	4	4	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	100	62	78	83
Calcium	ppm	ASTM D5185m	0	6	5	4
Phosphorus	ppm	ASTM D5185m	0	<1	5	3
Zinc	ppm	ASTM D5185m	0	0	9	0
Sulfur	ppm	ASTM D5185m	23500	23146	18457	17468

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	1	<1
Sodium	ppm	ASTM D5185m		25	32	28
Potassium	ppm	ASTM D5185m	>20	8	6	5
Water	%	ASTM D6304	>0.05	0.020	0.018	0.031
ppm Water	ppm	ASTM D6304	>500	207	189.3	316.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	10510	99876
Particles >6µm		ASTM D7647	>1300	---	▲ 3562	▲ 28916
Particles >14µm		ASTM D7647	>80	---	▲ 271	▲ 1326
Particles >21µm		ASTM D7647	>20	---	▲ 49	▲ 231
Particles >38µm		ASTM D7647	>4	---	3	3
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 21/19/15	▲ 22/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.36	0.39	0.35

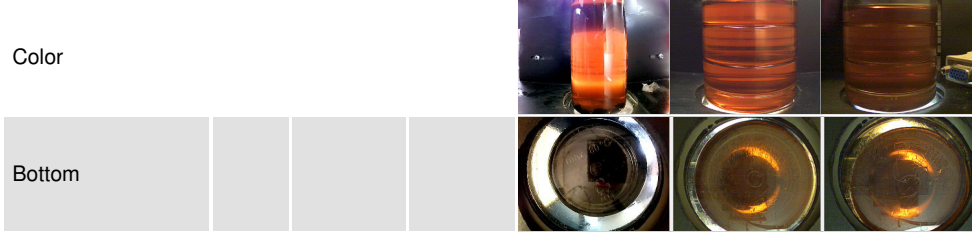
OIL ANALYSIS REPORT



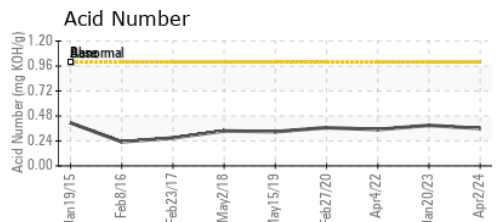
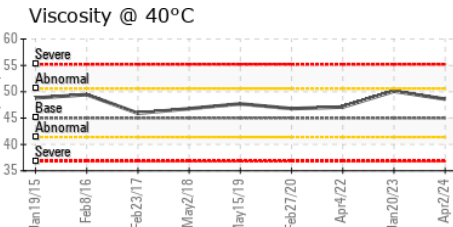
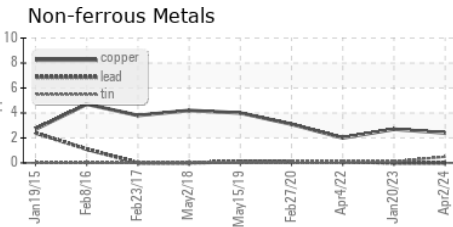
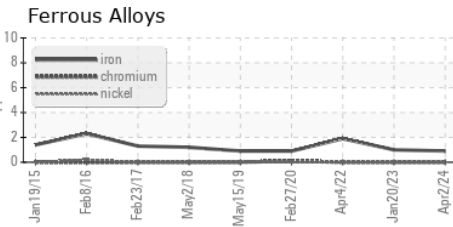
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	▲ MODER	NONE	NONE
Debris	scalar	*Visual	▲ MODER	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.6	50.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017159
Lab Number : 06152615
Unique Number : 10982693
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 17 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Don Baldrige

VWR INTERNATIONAL
 1050 SATELLITE BLVD NW
 SUWANEE, GA
 US 30024
 Contact: TROY HOUSE
 TROY.HOUSE@AVANTORSCIENCES.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)