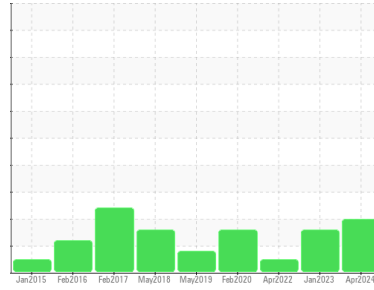




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SK 19 1420225 (S/N 01810113)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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		KCPA017175	KCP55647	KCP45312
Sample Date	Client Info		02 Apr 2024	28 Jan 2023	04 Apr 2022
Machine Age	hrs	Client Info	5101	73403	73402
Oil Age	hrs	Client Info	4000	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

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	<1	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	<1	0	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	6	3	6
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	1
Barium	ppm	ASTM D5185m 90	4	3	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	1	0	<1
Magnesium	ppm	ASTM D5185m 100	68	81	55
Calcium	ppm	ASTM D5185m 0	4	2	3
Phosphorus	ppm	ASTM D5185m 0	0	12	4
Zinc	ppm	ASTM D5185m 0	5	7	4
Sulfur	ppm	ASTM D5185m 23500	25053	20210	15537

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	1	1	1
Sodium	ppm	ASTM D5185m	31	29	31
Potassium	ppm	ASTM D5185m >20	7	5	2
Water	%	ASTM D6304 >0.05	0.016	0.024	0.028
ppm Water	ppm	ASTM D6304 >500	162	244.5	280.0

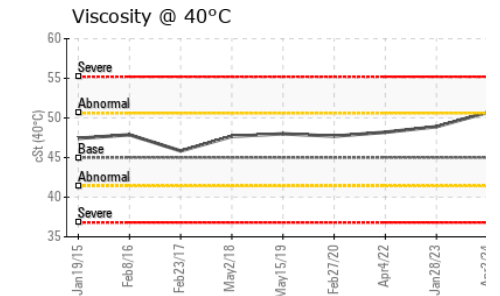
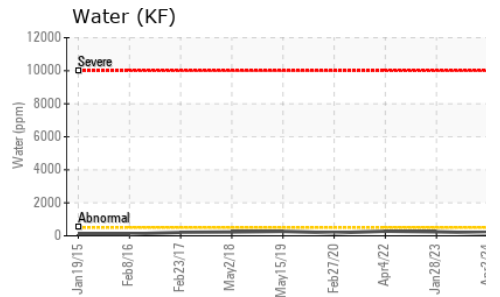
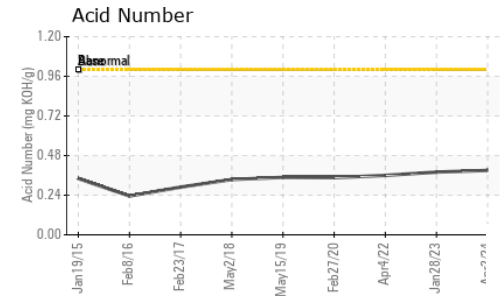
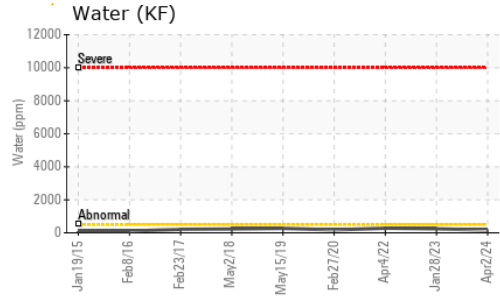
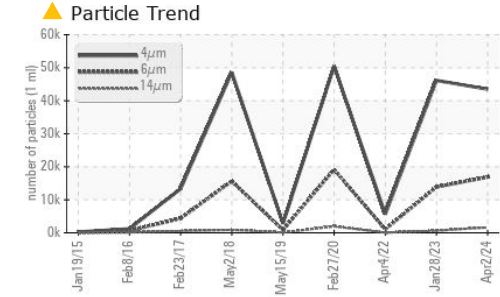
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		43513	46140	5631
Particles >6µm	ASTM D7647	>1300	▲ 16896	▲ 13893	1034
Particles >14µm	ASTM D7647	>80	▲ 1624	▲ 625	60
Particles >21µm	ASTM D7647	>20	▲ 374	▲ 116	15
Particles >38µm	ASTM D7647	>4	▲ 9	2	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/21/18	▲ 23/21/16	20/17/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.39	0.38	0.36

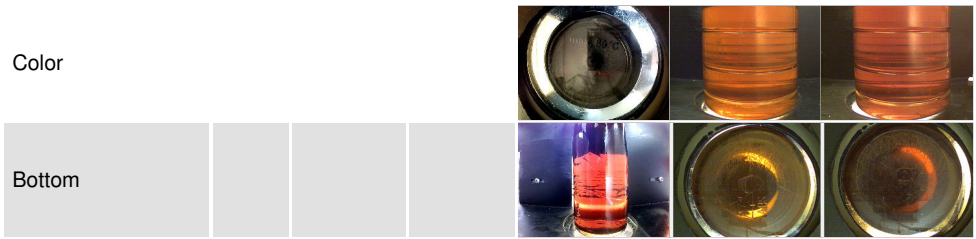
OIL ANALYSIS REPORT



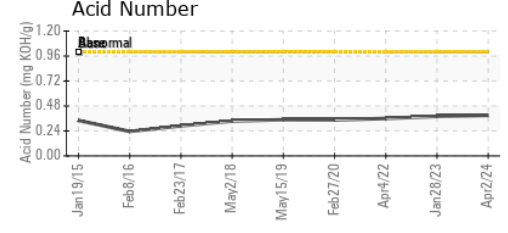
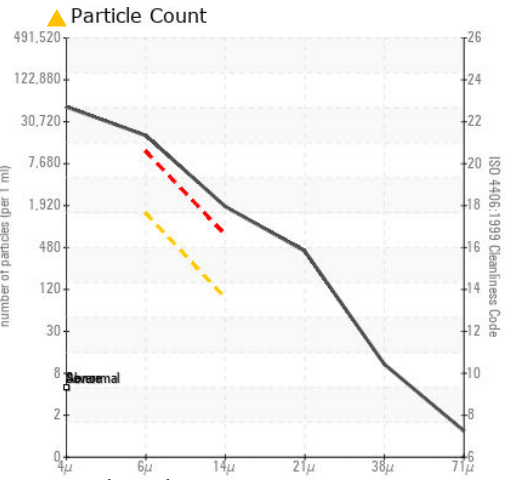
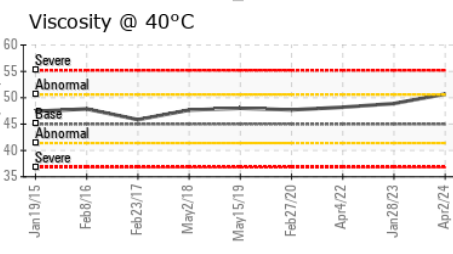
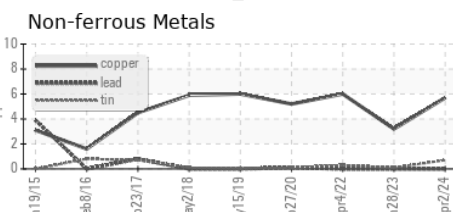
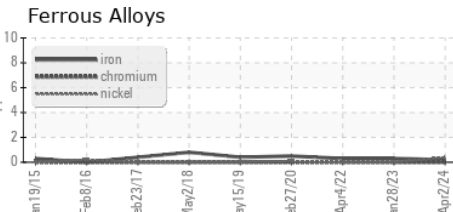
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	50.7	48.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017175
Lab Number : 06151193
Unique Number : 10981271
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 16 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 19 Apr 2024 - Don Baldrige

VWR INTERNATIONAL
 1050 SATELLITE BLVD NW
 SUWANEE, GA
 US 30024
 Contact: Alan Everett
 alan.everett@vwr.com
 T: (678)288-3124
 F:

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)