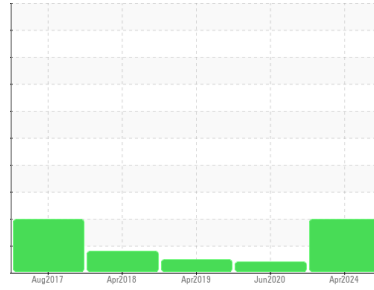




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER BSD 50 4545226 (S/N 1245)

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA016914	KCP26148	KCP12521
Sample Date	Client Info		01 Apr 2024	08 Jun 2020	16 Apr 2019
Machine Age	hrs	Client Info	50458	41950	39281
Oil Age	hrs	Client Info	7000	3000	416
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	2	2
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >3	2	2	3
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >10	1	<1	2
Lead	ppm	ASTM D5185m >10	1	0	0
Copper	ppm	ASTM D5185m >50	26	7	6
Tin	ppm	ASTM D5185m >10	1	0	0
Antimony	ppm	ASTM D5185m	---	2	0
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	<1
Barium	ppm	ASTM D5185m 90	<1	<1	0
Molybdenum	ppm	ASTM D5185m 0	3	1	<1
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 100	<1	0	2
Calcium	ppm	ASTM D5185m 0	4	0	0
Phosphorus	ppm	ASTM D5185m 0	3	3	<1
Zinc	ppm	ASTM D5185m 0	4	7	43
Sulfur	ppm	ASTM D5185m 23500	19277	19065	25006

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	10	6	4
Sodium	ppm	ASTM D5185m	0	0	<1
Potassium	ppm	ASTM D5185m >20	1	5	<1
Water	%	ASTM D6304 >0.05	0.004	0.009	0.006
ppm Water	ppm	ASTM D6304 >500	48	93.3	60

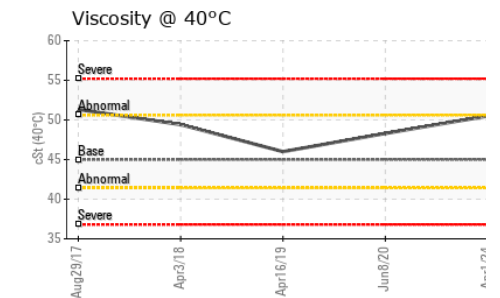
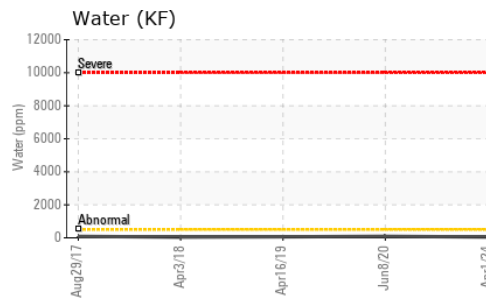
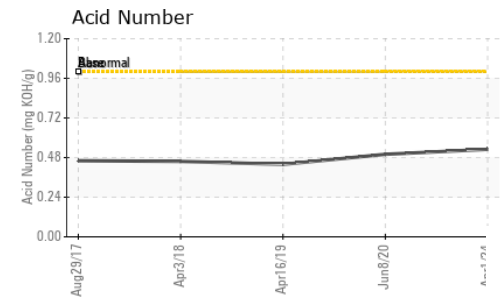
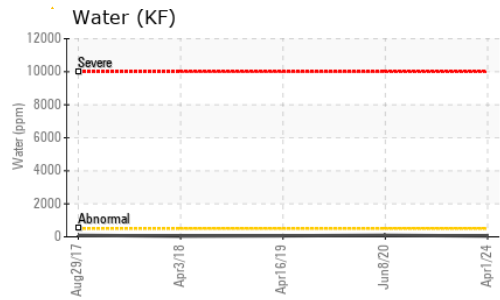
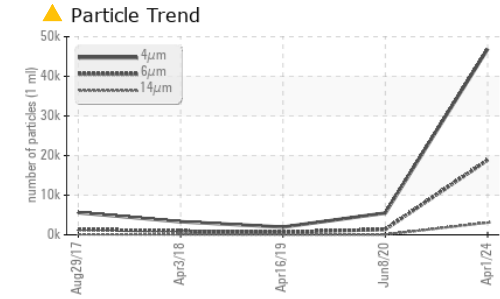
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		46892	5488	1948
Particles >6µm	ASTM D7647	>1300	▲ 18880	● 1352	669
Particles >14µm	ASTM D7647	>80	▲ 3084	73	65
Particles >21µm	ASTM D7647	>20	▲ 1102	19	20
Particles >38µm	ASTM D7647	>4	▲ 55	2	1
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/21/19	● 18/13	17/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.53	0.500	0.439

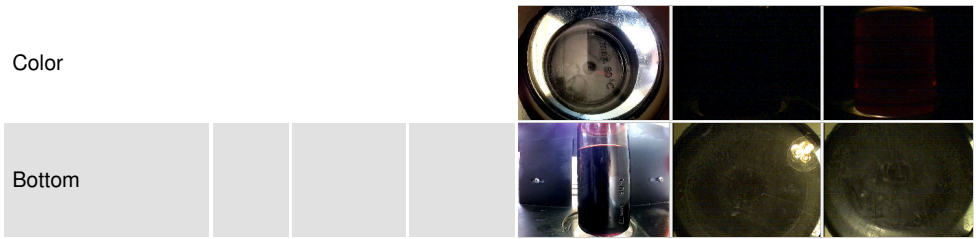
OIL ANALYSIS REPORT



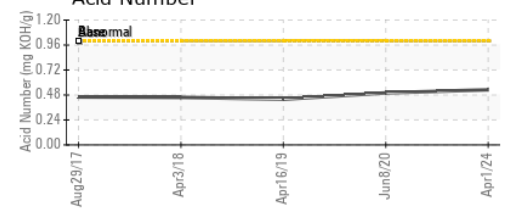
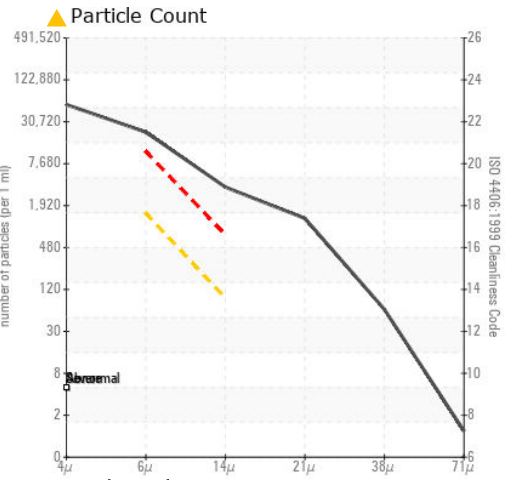
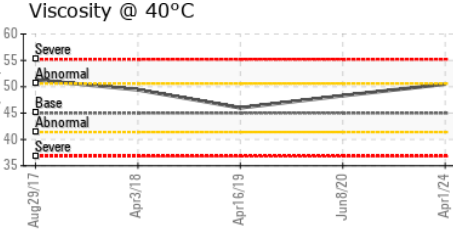
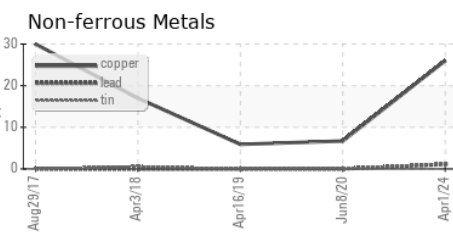
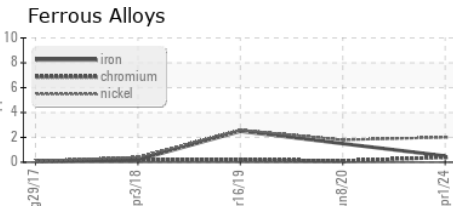
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	VLITE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	50.5	48.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016914 **Received** : 11 Apr 2024
Lab Number : 06146612 **Tested** : 12 Apr 2024
Unique Number : 10976690 **Diagnosed** : 16 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ROL-TEC INC
 1150 GLORY RD
 GREEN BAY, WI
 US 54304
 Contact: J. STIVVE
 jstivve@rol-tec.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)