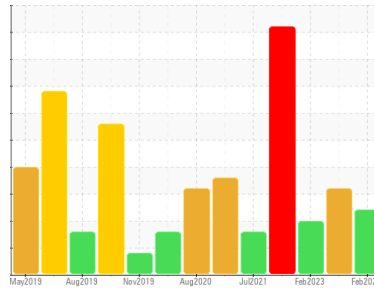


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
KAESER BSD 50 6561972 (S/N 1950)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

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.

Wear

The tin level is abnormal. All other component wear rates are normal.

Contamination

There is a moderate 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		KCPA008963	KC05941384	KCP46204
Sample Date	Client Info		01 Feb 2024	28 Aug 2023	16 Feb 2023
Machine Age	hrs	Client Info	27800	25544	23212
Oil Age	hrs	Client Info	0	0	3708
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	4	6	8
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	24	▲ 52	▲ 51
Tin	ppm	ASTM D5185m >10	▲ 22	▲ 39	▲ 37
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
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	1	0	0
Magnesium	ppm	ASTM D5185m 90	11	0	0
Calcium	ppm	ASTM D5185m 2	0	0	0
Phosphorus	ppm	ASTM D5185m	0	4	0
Zinc	ppm	ASTM D5185m	78	37	0
Sulfur	ppm	ASTM D5185m	19997	17902	18697

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	1	0
Sodium	ppm	ASTM D5185m	1	1	<1
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	0.007	0.008	0.009
ppm Water	ppm	ASTM D6304 >500	74	86.6	95.2

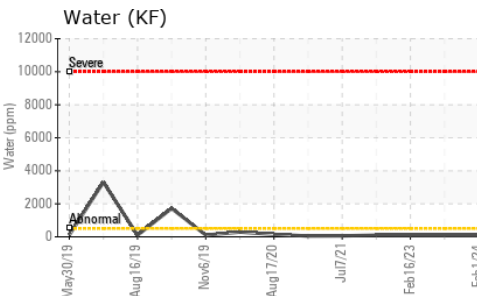
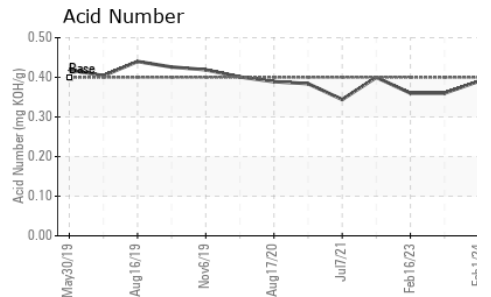
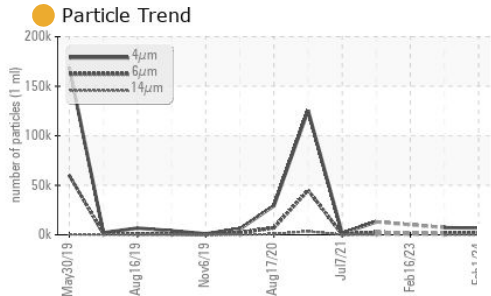
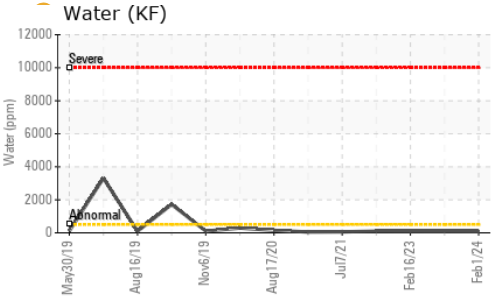
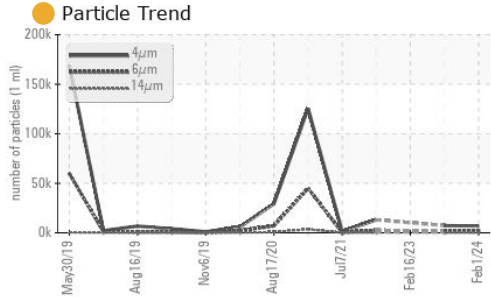
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		6860	7207	---
Particles >6µm	ASTM D7647	>1300	● 2057	● 1480	---
Particles >14µm	ASTM D7647	>80	● 120	● 87	---
Particles >21µm	ASTM D7647	>20	● 22	● 26	---
Particles >38µm	ASTM D7647	>4	1	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	● 20/18/14	● 20/18/14	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.39	0.36	0.36

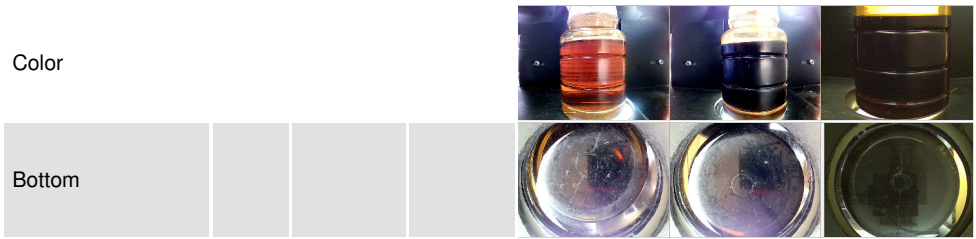
OIL ANALYSIS REPORT



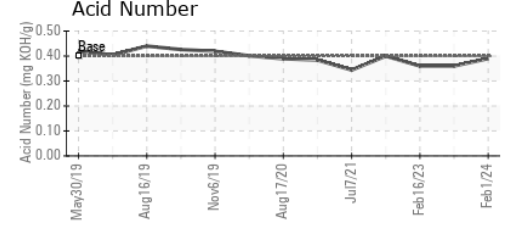
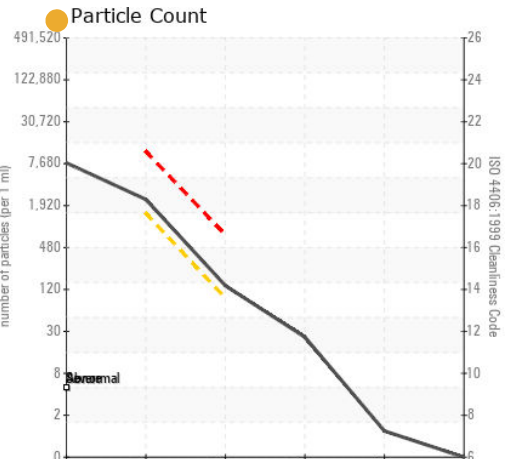
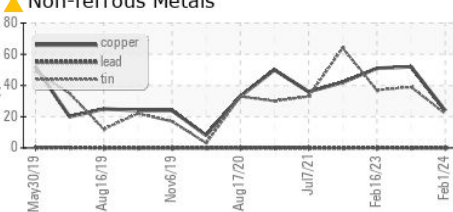
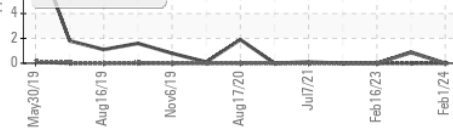
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.3	44.5	44.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA008963 **Received** : 20 Mar 2024
Lab Number : 06123633 **Tested** : 25 Mar 2024
Unique Number : 10937784 **Diagnosed** : 25 Mar 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CHARLOTTE PIPE AND FOUNDRY CO
 3425 STANWOOD BLVD NE
 HUNTSVILLE, AL 35811
 Contact: R. DAUGHDRILL
 rdaughdrill@charlottepipe.com
 T:
 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)