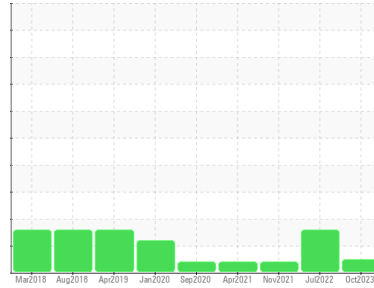




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER ASD 40 4904959 (S/N 1003)

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 on this sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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			KCPA007908	KC96313	KCP43566
Sample Date	Client Info			27 Oct 2023	25 Jul 2022	17 Nov 2021
Machine Age	hrs	Client Info		51827	0	43016
Oil Age	hrs	Client Info		0	0	2064
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	2
Chromium	ppm	ASTM D5185m	>10	<1	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	2	<1	2
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	10	3	6
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

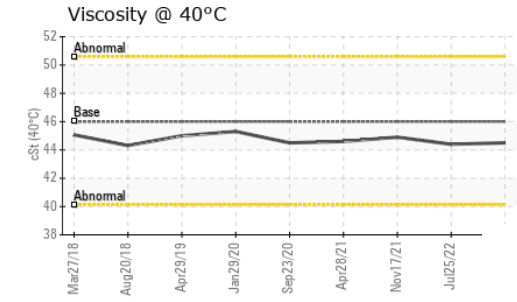
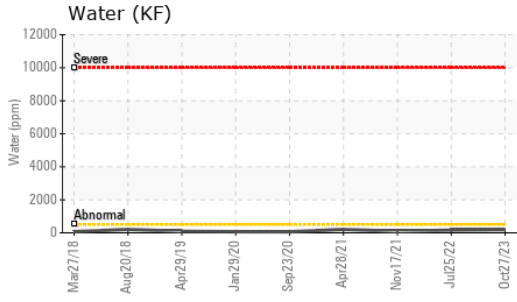
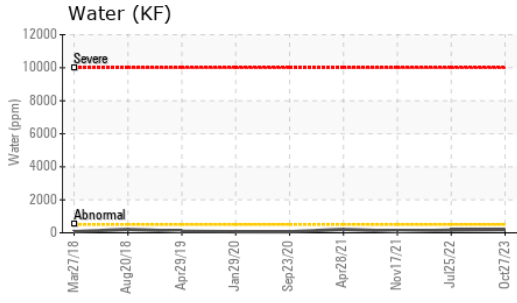
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	1	0
Barium	ppm	ASTM D5185m	90	<1	11	4
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	90	31	32	37
Calcium	ppm	ASTM D5185m	2	<1	0	1
Phosphorus	ppm	ASTM D5185m		0	2	5
Zinc	ppm	ASTM D5185m		32	26	65
Sulfur	ppm	ASTM D5185m		20564	21515	16994

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	2
Sodium	ppm	ASTM D5185m		11	8	12
Potassium	ppm	ASTM D5185m	>20	4	<1	2
Water	%	ASTM D6304	>0.05	0.019	0.016	0.008
ppm Water	ppm	ASTM D6304	>500	194.1	162.2	89.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	7505	---
Particles >6µm		ASTM D7647	>1300	---	▲ 3298	---
Particles >14µm		ASTM D7647	>80	---	▲ 367	---
Particles >21µm		ASTM D7647	>20	---	▲ 125	---
Particles >38µm		ASTM D7647	>4	---	3	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 20/19/16	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.38	0.42	0.430

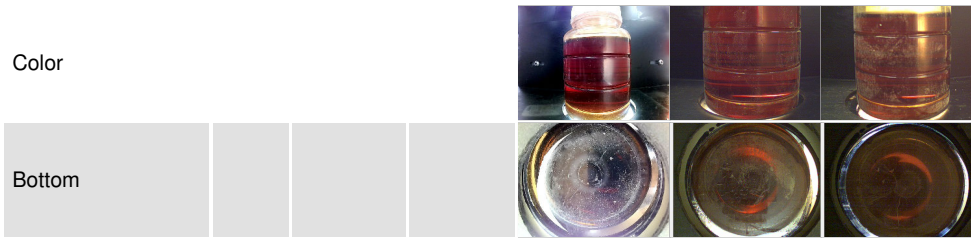
OIL ANALYSIS REPORT



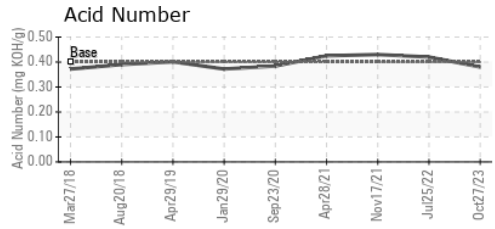
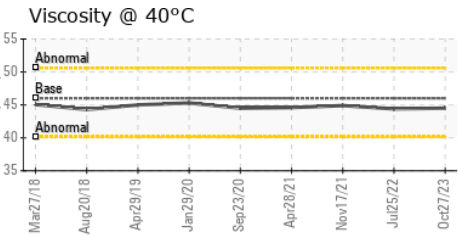
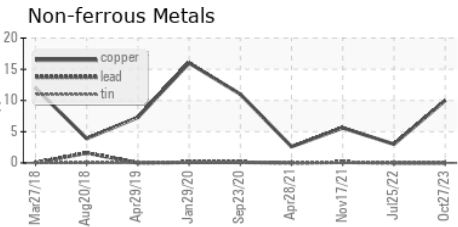
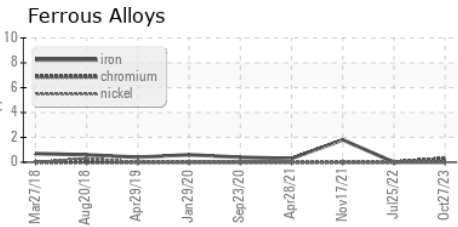
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.5	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA007908 **Received** : 08 Nov 2023
Lab Number : 06001603 **Diagnosed** : 09 Nov 2023
Unique Number : 10729963 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BAY STATE MILLING
 13643 COUNTY RD 13.7
 STERLING, CO
 US 80751
 Contact: Service Manager

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)

T:
F: