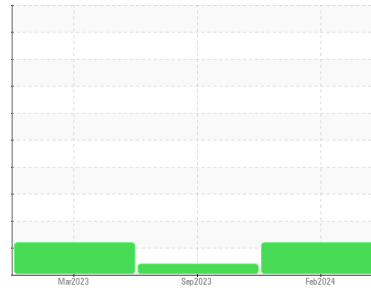


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 8685446

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-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 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			KCPA015446	KCPA006425	KCP54307
Sample Date	Client Info			14 Feb 2024	20 Sep 2023	01 Mar 2023
Machine Age	hrs	Client Info		11655	8124	3146
Oil Age	hrs	Client Info		6765	0	3146
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	1
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	<1	<1
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	7	5	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

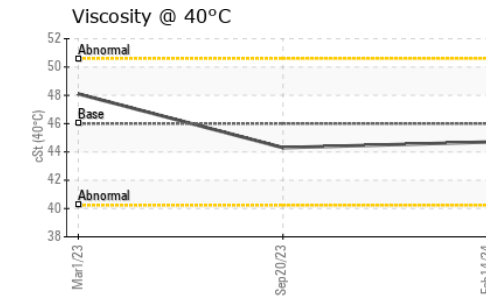
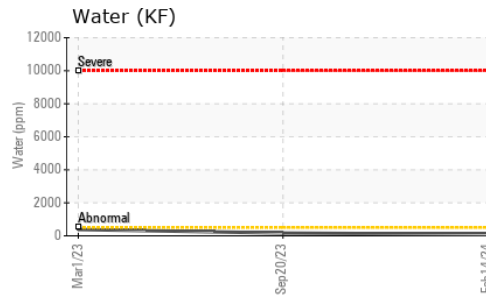
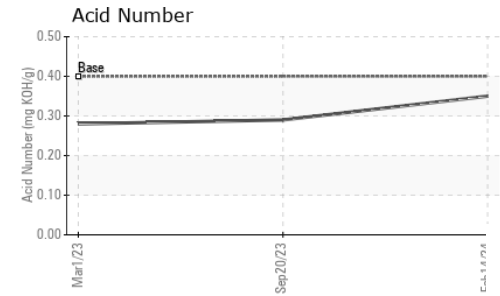
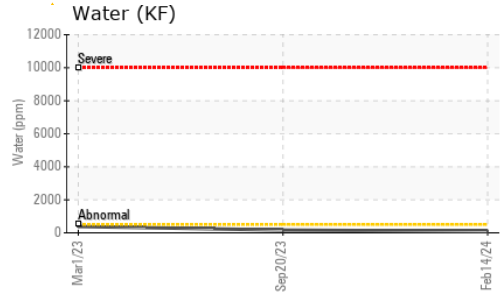
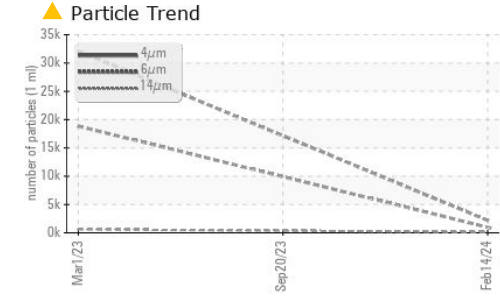
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	14	19
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	90	17	35	41
Calcium	ppm	ASTM D5185m	2	2	3	3
Phosphorus	ppm	ASTM D5185m		2	4	6
Zinc	ppm	ASTM D5185m		17	0	4
Sulfur	ppm	ASTM D5185m		16209	21954	17318

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		15	10	11
Potassium	ppm	ASTM D5185m	>20	2	3	2
Water	%	ASTM D6304	>0.05	0.009	0.016	0.038
ppm Water	ppm	ASTM D6304	>500	93	166.5	384.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2200	---	32109
Particles >6µm		ASTM D7647	>1300	973	---	▲ 18848
Particles >14µm		ASTM D7647	>80	▲ 107	---	▲ 604
Particles >21µm		ASTM D7647	>20	▲ 22	---	13
Particles >38µm		ASTM D7647	>4	0	---	0
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 18/17/14	---	▲ 22/21/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.35	0.29	0.28

OIL ANALYSIS REPORT

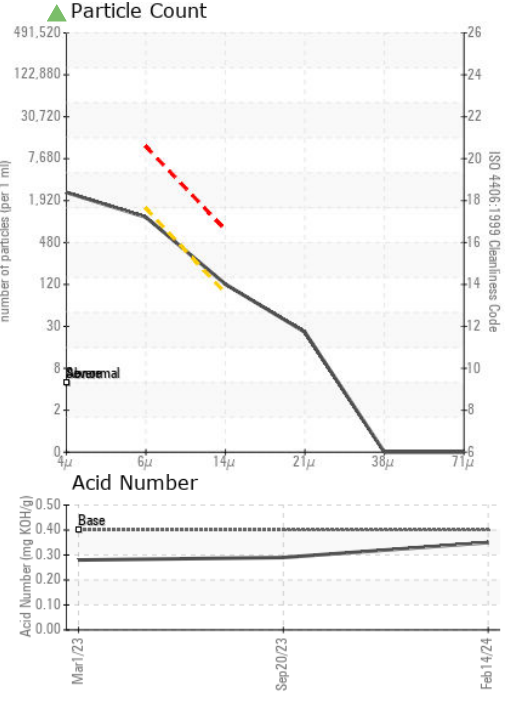
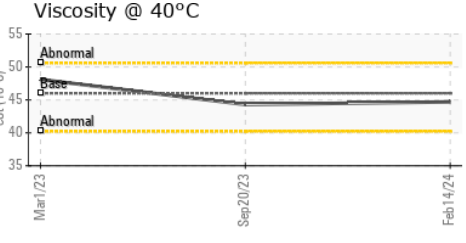
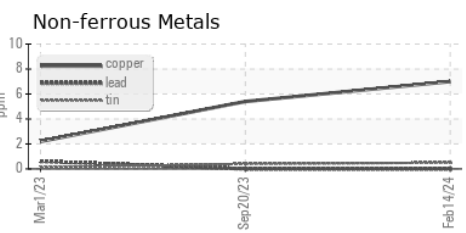
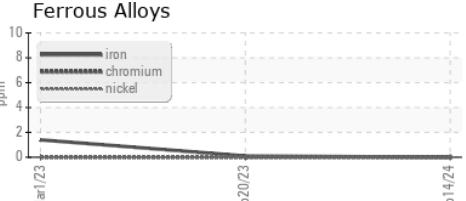


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.7	44.3	48.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015446 **Received** : 22 Feb 2024
Lab Number : 06097700 **Tested** : 23 Feb 2024
Unique Number : 10890553 **Diagnosed** : 25 Feb 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

MENASHA PACKAGING
 225 BROOKS AVE
 NEENAH, WI
 US 54956
 Contact: Service Manager
 SERVICE@NORTHERNCOMPRESSOR.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)