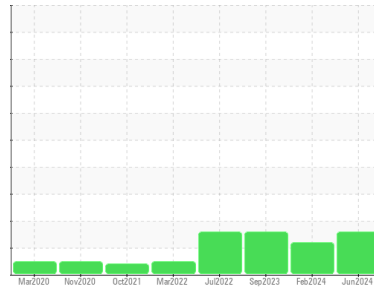




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER 6903788

Component

Compressor

Fluid

KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

The 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		KCPA017610	KCPA015492	KCPA006422
Sample Date	Client Info		19 Jun 2024	14 Feb 2024	20 Sep 2023
Machine Age	hrs	Client Info	40690	37708	34530
Oil Age	hrs	Client Info	2982	6634	0
Oil Changed	Client Info		Not Chngd	Changed	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	0	0
Chromium	ppm	ASTM D5185m >10	<1	<1	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >10	3	1	0
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	7	19	7
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m 90	11	12	0
Molybdenum	ppm	ASTM D5185m	<1	0	<1
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 90	21	14	31
Calcium	ppm	ASTM D5185m 2	0	0	2
Phosphorus	ppm	ASTM D5185m	6	<1	3
Zinc	ppm	ASTM D5185m	22	24	17
Sulfur	ppm	ASTM D5185m	19262	18713	21864

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	<1
Sodium	ppm	ASTM D5185m	17	16	21
Potassium	ppm	ASTM D5185m >20	4	5	4
Water	%	ASTM D6304 >0.05	0.014	0.006	0.020
ppm Water	ppm	ASTM D6304 >500	148	60	207.9

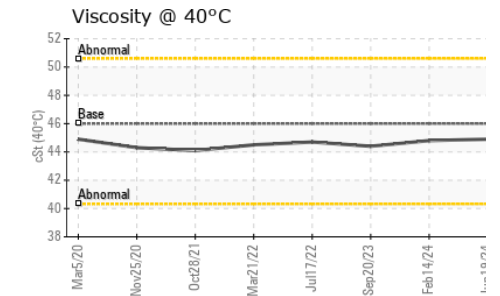
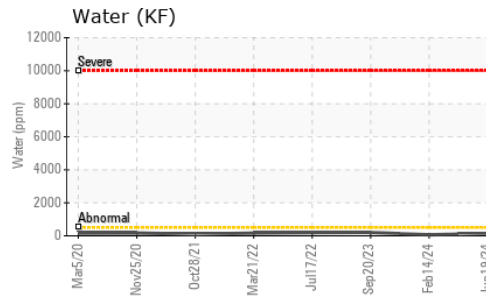
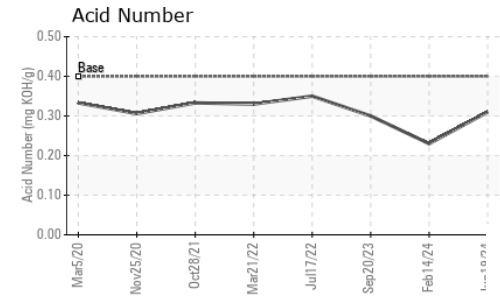
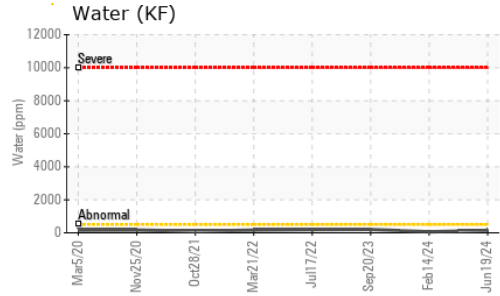
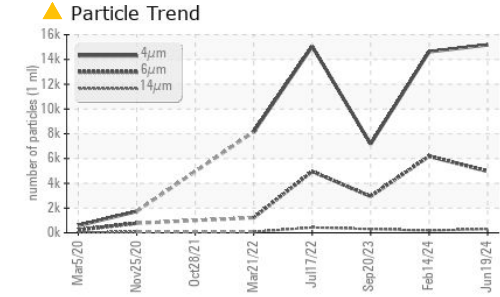
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		15179	14625	7174
Particles >6µm	ASTM D7647	>1300	▲ 4973	▲ 6189	▲ 2940
Particles >14µm	ASTM D7647	>80	▲ 296	▲ 185	▲ 295
Particles >21µm	ASTM D7647	>20	▲ 33	20	▲ 66
Particles >38µm	ASTM D7647	>4	0	1	2
Particles >71µm	ASTM D7647	>3	0	0	1
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	▲ 21/20/15	▲ 20/19/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.31	0.23	0.30

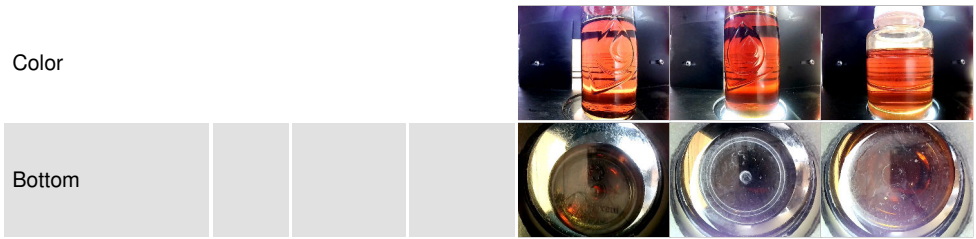
OIL ANALYSIS REPORT



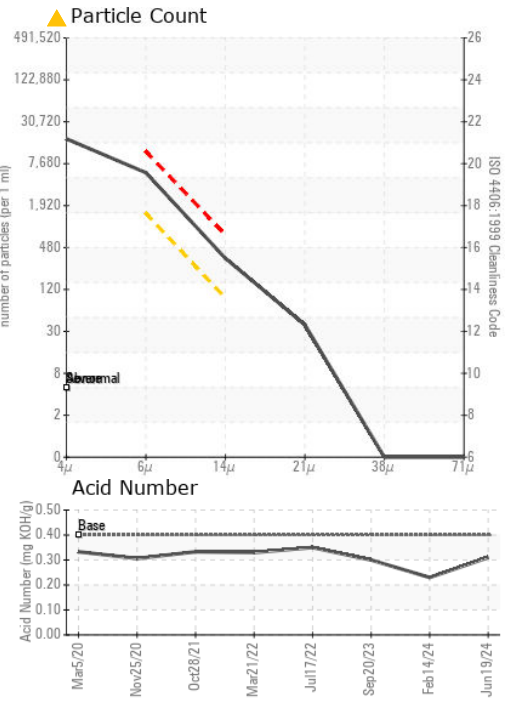
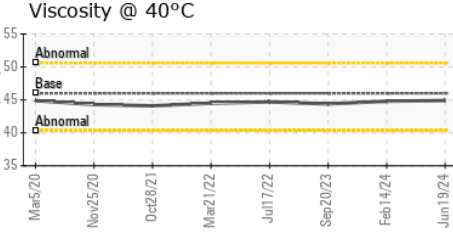
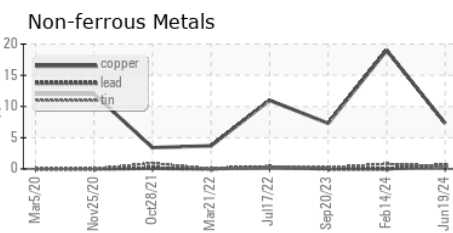
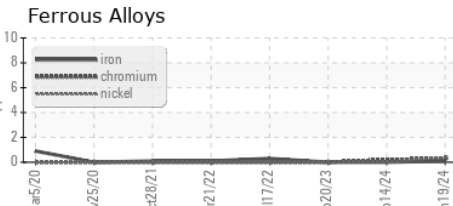
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.9	44.8	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017610 **Received** : 24 Jun 2024
Lab Number : 06218769 **Tested** : 25 Jun 2024
Unique Number : 11096966 **Diagnosed** : 26 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

MENASHA PACKAGING
 2255 BROOKS AVE
 NEENAH, WI
 US 54956
 Contact: Service Manager
 SERVICE@NORTHERNCOMPRESSOR.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)