



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
KAESER 1241 - BUNGE
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		APC0000701	APC0000710	APCI2352052
Sample Date		Client Info		09 Feb 2024	02 Nov 2023	08 Sep 2023
Machine Age	hrs	Client Info		7314	4962	3644
Oil Age	hrs	Client Info		2354	4962	3644
Filter Age	hrs	Client Info		2354	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	0	0
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	1	0	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	5	16	13
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

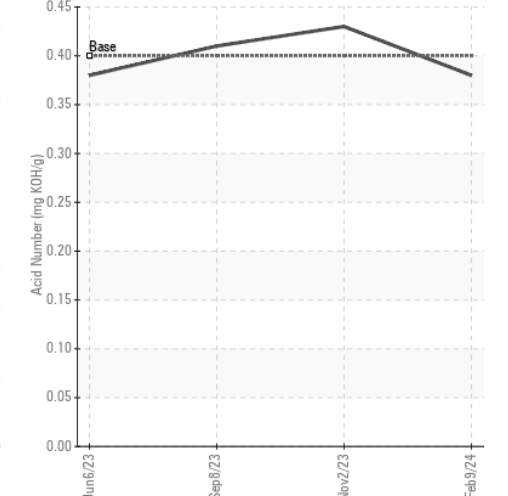
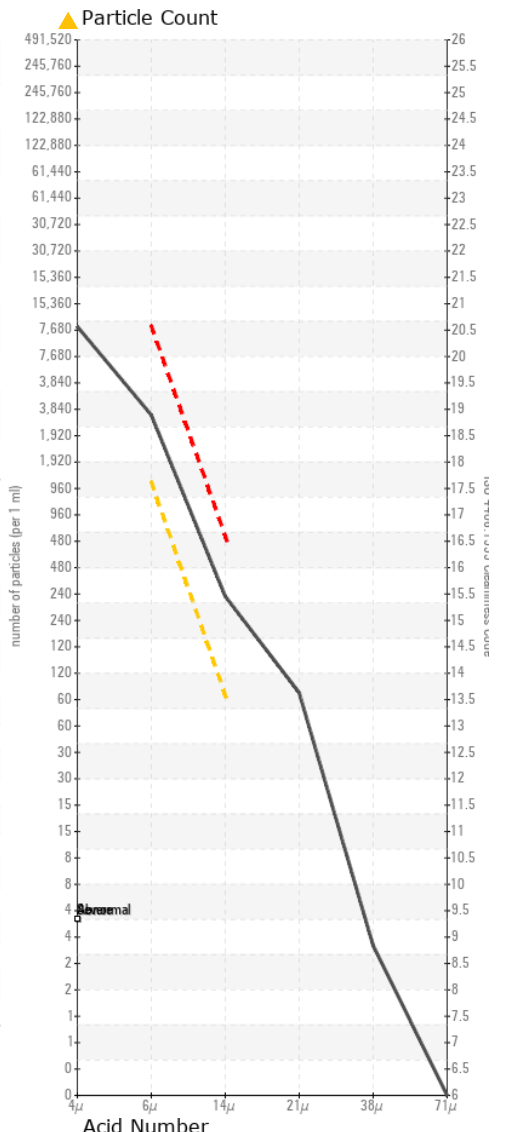
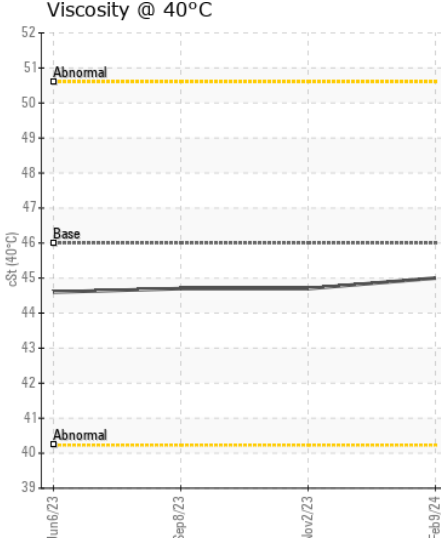
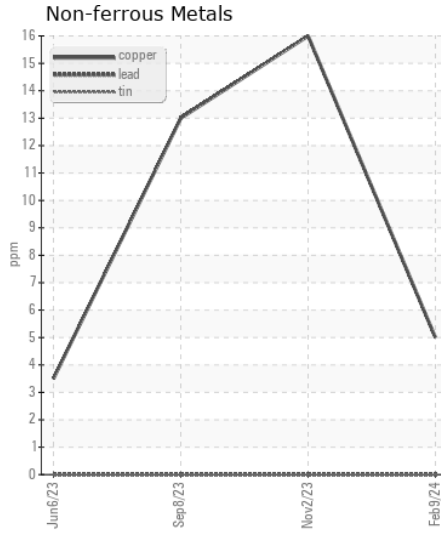
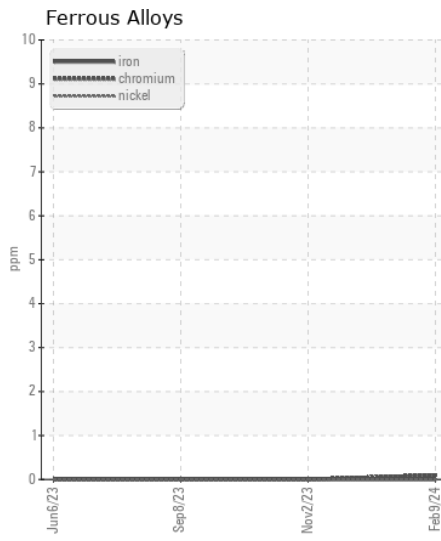
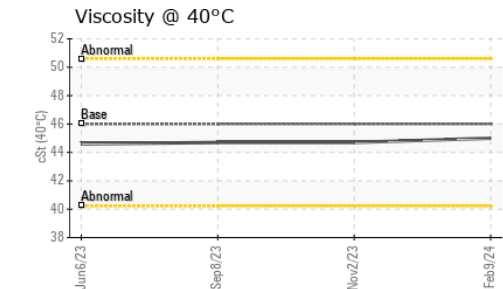
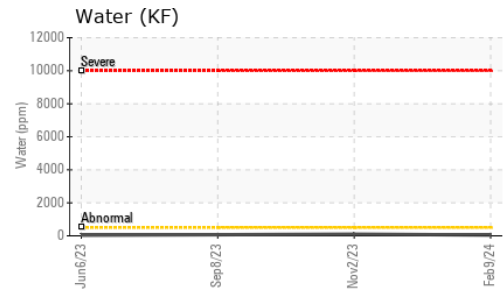
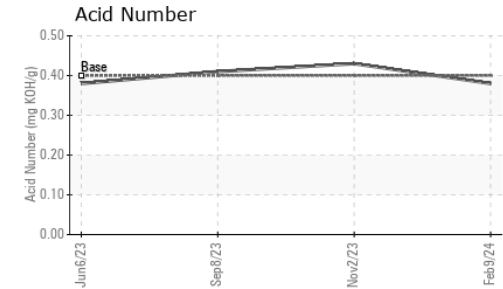
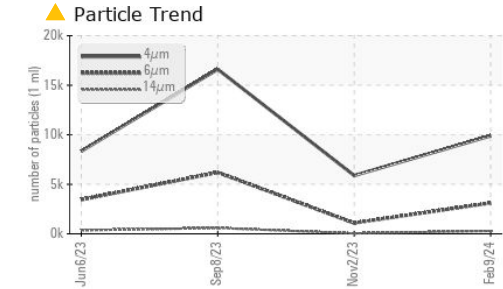
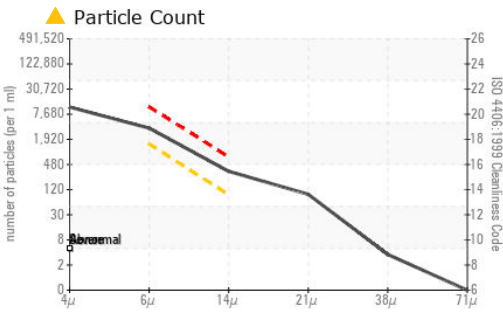
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	1	0	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	1
Water	%	ASTM D6304	>0.05	0.004	0.010	0.006
ppm Water	ppm	ASTM D6304	>500	46	103.3	66.1
Particles >4µm		ASTM D7647		9896	5883	16613
Particles >6µm		ASTM D7647	>1300	▲ 3111	1088	▲ 6199
Particles >14µm		ASTM D7647	>80	▲ 290	42	▲ 589
Particles >21µm		ASTM D7647	>20	▲ 82	14	▲ 179
Particles >38µm		ASTM D7647	>4	3	1	▲ 8
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	∓-/17/13	▲ 20/19/15	20/17/13	▲ 21/20/16
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	<1	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	2	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	90	2	0	0
Calcium	ppm	ASTM D5185m	2	<1	0	0
Phosphorus	ppm	ASTM D5185m		0	<1	4
Zinc	ppm	ASTM D5185m		9	0	0
Sulfur	ppm	ASTM D5185m		16676	14590	19931
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.38	0.43	0.41
Visc @ 40°C	cSt	ASTM D445	46	45.0	44.7	44.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : APC0000701 **Received** : 14 Feb 2024
Lab Number : 06089597 **Tested** : 15 Feb 2024
Unique Number : 10877042 **Diagnosed** : 16 Feb 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

AIR PRODUCTS AND CHEMICALS INC - ALLENTOWN
 7201 HAMILTON BLVD
 ALLENTOWN, PA
 US 18195
 Contact: MICHAEL PROTZEK
 protzema@airproducts.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)