OIL ANALYSIS REPORT

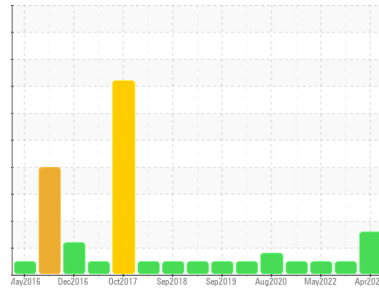**KAESER COMPRESSORS** — Built for a lifetime.

Sample Rating Trend

ISO

Machine Id
KAESER SFC 37 5437146 (S/N 1056)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

▲ **Recommendation**
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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		**KC129308**	KC101486	KC91603
Sample Date		Client Info		**01 Apr 2024**	08 May 2023	25 May 2022
Machine Age	hrs	Client Info		**56088**	49534	43533
Oil Age	hrs	Client Info		**6554**	6000	6000
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**0**	0	0
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>3	**0**	0	0
Titanium	ppm	ASTM D5185m	>3	**<1**	<1	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**7**	5	7
Tin	ppm	ASTM D5185m	>10	**<1**	<1	0
Antimony	ppm	ASTM D5185m		**---**	---	---
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	2
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m	90	**<1**	10	0
Calcium	ppm	ASTM D5185m	2	**0**	0	0
Phosphorus	ppm	ASTM D5185m		**0**	0	4
Zinc	ppm	ASTM D5185m		**0**	28	2

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	<1	0
Sodium	ppm	ASTM D5185m		**0**	1	0
Potassium	ppm	ASTM D5185m	>20	**<1**	4	0
Water	%	ASTM D6304	>0.05	**0.005**	0.005	0.017
ppm Water	ppm	ASTM D6304	>500	**57**	54.1	172.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**12632**	1032	1196
Particles >6µm		ASTM D7647	>1300	▲ **3134**	328	256
Particles >14µm		ASTM D7647	>80	▲ **183**	31	22
Particles >21µm		ASTM D7647	>20	▲ **54**	10	5
Particles >38µm		ASTM D7647	>4	**4**	2	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ **21/19/15**	17/16/12	17/15/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.45**	0.41	0.38

OIL ANALYSIS REPORT

KAESER COMPRESSORS — Built for a lifetime.™

Particle Trend

Legend: 4μm, 6μm, 14μm

Water (KF)

Severe / Abnormal

Acid Number

Base

Water (KF)

Severe / Abnormal

Viscosity @ 40°C

Abnormal / Base / Abnormal
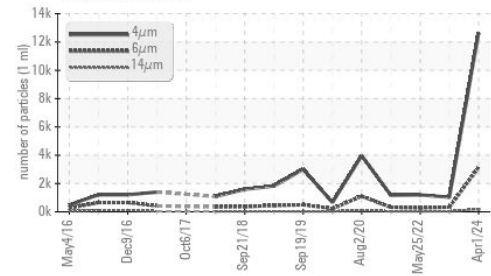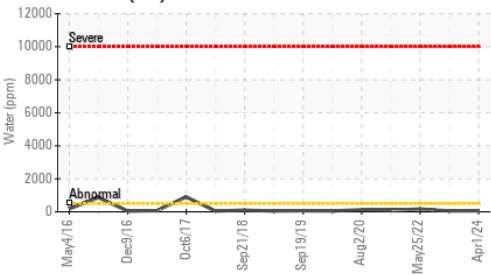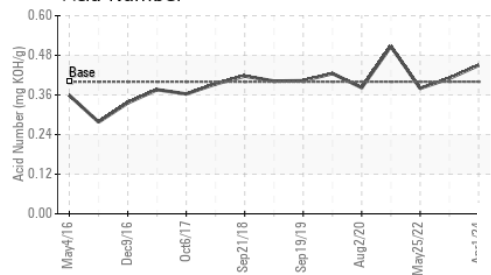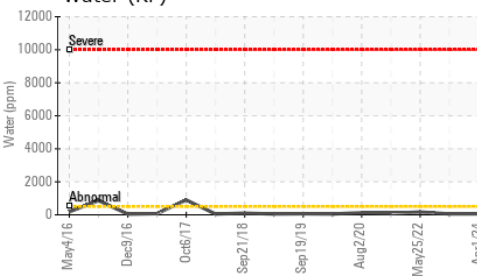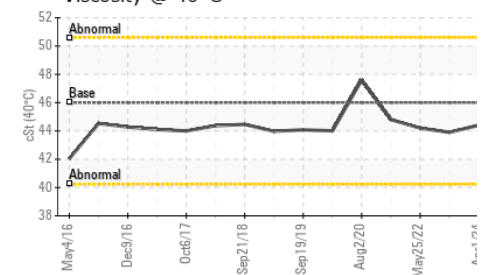
VISUAL

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**44.4**	43.9	44.2

SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

Ferrous Alloys

Legend: iron, chromium, nickel

Non-ferrous Metals

Legend: copper, lead, tin

Viscosity @ 40°C

Abnormal / Base / Abnormal

Particle Count

Acid Number

Base
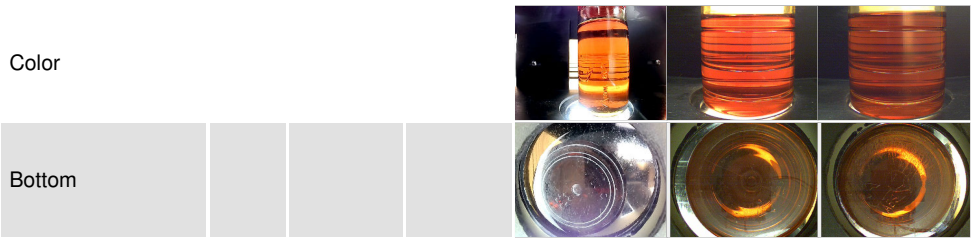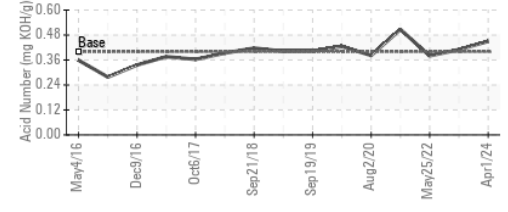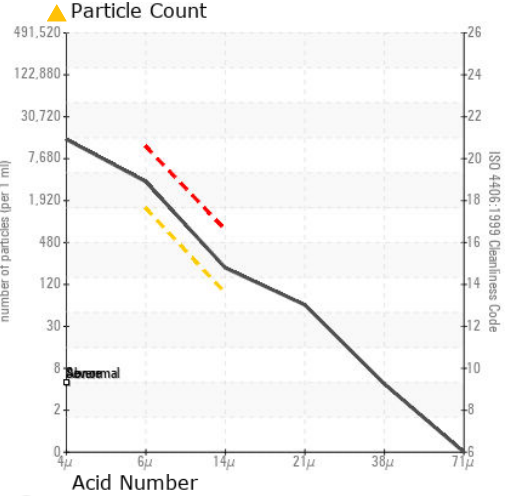
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC129308
Lab Number : 06139887
Unique Number : 10964695
Test Package : IND 2

Received : 05 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 2024 - Don Baldridge

ARMSTRONG POWER
2313 STATE ROUTE 156
SHELOCTA, PA
US 15774
Contact:

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY — Certificate L2367

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: