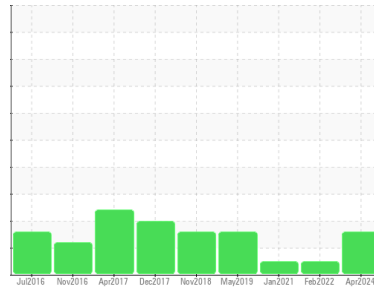




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SFC 22ST 5317538 (S/N 1002)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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 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	<b>KCPA016408</b>	KCP48603	KCP28018
Sample Date	Client Info	<b>18 Apr 2024</b>	07 Feb 2022	22 Jan 2021
Machine Age	hrs	<b>43103</b>	39022	31123
Oil Age	hrs	<b>4000</b>	3000	3000
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	<1
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	2	<1
Lead	ppm	ASTM D5185m >10	<1	0	<1
Copper	ppm	ASTM D5185m >50	12	5	6
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<1	0
Barium	ppm	ASTM D5185m 90	1	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	<1
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 90	10	3	19
Calcium	ppm	ASTM D5185m 2	3	0	0
Phosphorus	ppm	ASTM D5185m	3	12	<1
Zinc	ppm	ASTM D5185m	15	<1	32
Sulfur	ppm	ASTM D5185m	19067	14072	15547

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	4	3	23
Potassium	ppm	ASTM D5185m >20	2	<1	0
Water	%	ASTM D6304 >0.05	0.008	0.003	0.006
ppm Water	ppm	ASTM D6304 >500	88	35.5	69.3

## FLUID CLEANLINESS

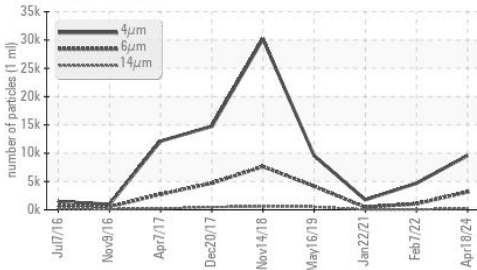
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	9581	4691	1765
Particles >6µm	ASTM D7647 >1300	▲ 3173	1061	456
Particles >14µm	ASTM D7647 >80	▲ 198	52	36
Particles >21µm	ASTM D7647 >20	● 31	7	9
Particles >38µm	ASTM D7647 >4	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/19/15	17/13	16/12

## FLUID DEGRADATION

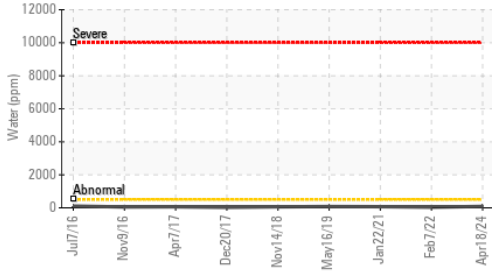
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.41	0.30	0.397

# OIL ANALYSIS REPORT

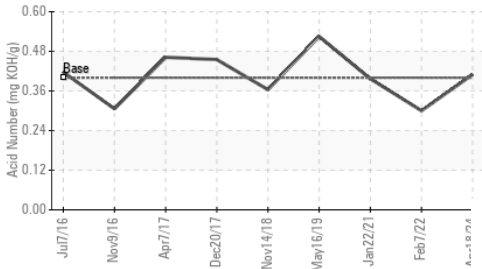
### ▲ Particle Trend



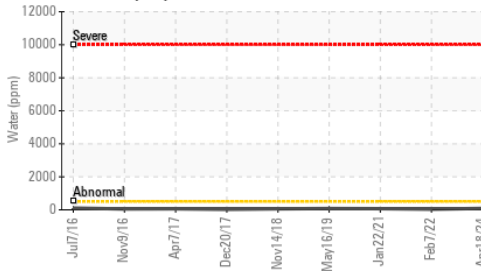
### Water (KF)



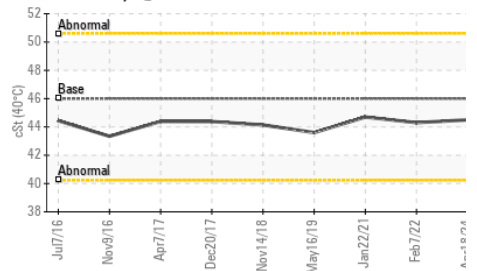
### Acid Number



### Water (KF)



### Viscosity @ 40°C

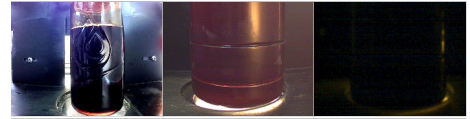


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

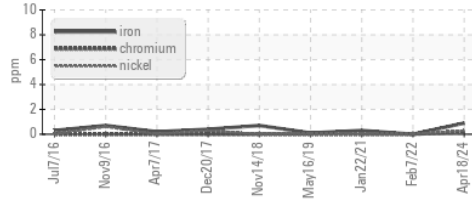


Bottom

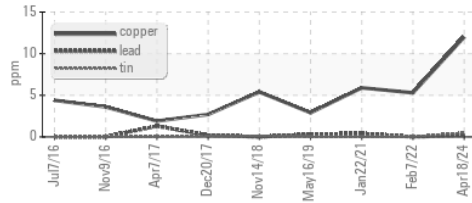


### GRAPHS

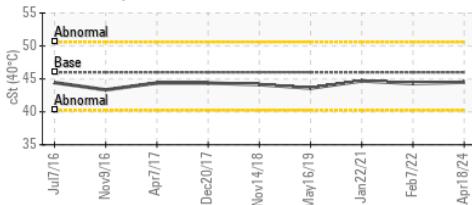
#### Ferrous Alloys



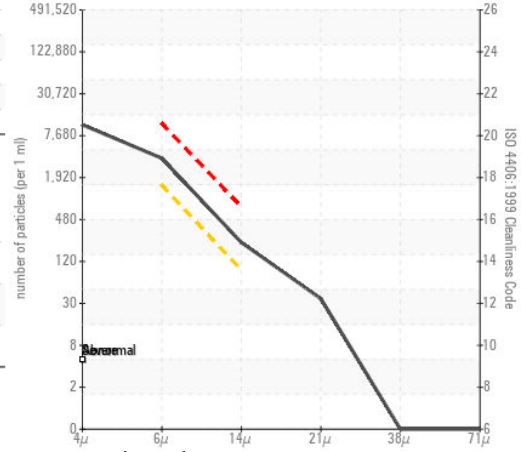
#### Non-ferrous Metals



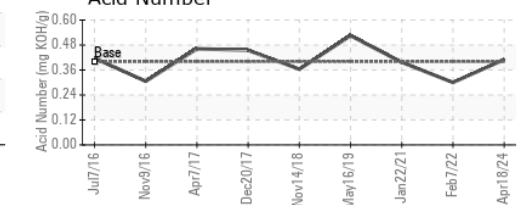
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KCPA016408

Lab Number : 06158478

Unique Number : 10993901

Test Package : IND 2 ( Additional Tests: KF, PrtCount )

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)

Received : 23 Apr 2024

Tested : 25 Apr 2024

Diagnosed : 25 Apr 2024 - Angela Borella

JD LASER

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JACKSON, WI

US 53037

Contact: MAINTENANCE

maintenance@jdlaserinc.com

T:

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