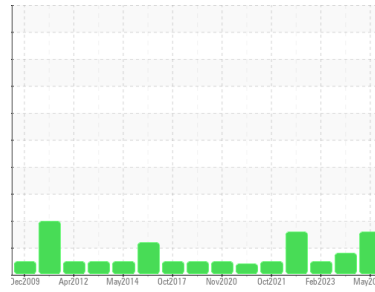




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER DSD 200 3369567 (S/N 1032)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. 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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA018030</b>	KCPA011827	KCP55055
Sample Date	Client Info	<b>30 May 2024</b>	04 Dec 2023	08 Feb 2023
Machine Age	hrs	<b>47984</b>	45933	42636
Oil Age	hrs	<b>7000</b>	0	5868
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>4</b>	5	9
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 90	<b>15</b>	2	0
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	<1	5
Zinc	ppm	ASTM D5185m	<b>14</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>20919</b>	16181	16732

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>10</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304 >0.05	<b>0.016</b>	0.003	0.004
ppm Water	ppm	ASTM D6304 >500	<b>161</b>	37	43.9

## FLUID CLEANLINESS

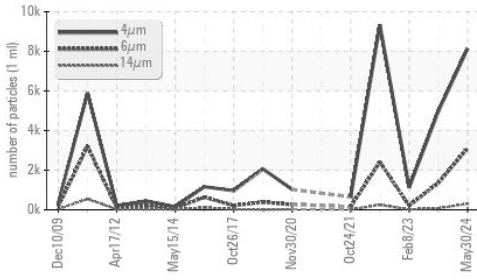
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>8142</b>	4973	1129
Particles >6µm	ASTM D7647 >1300	<b>▲ 3114</b>	● 1352	209
Particles >14µm	ASTM D7647 >80	<b>▲ 301</b>	73	14
Particles >21µm	ASTM D7647 >20	<b>▲ 71</b>	16	5
Particles >38µm	ASTM D7647 >4	<b>3</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 20/19/15</b>	● 19/18/13	17/15/11

## FLUID DEGRADATION

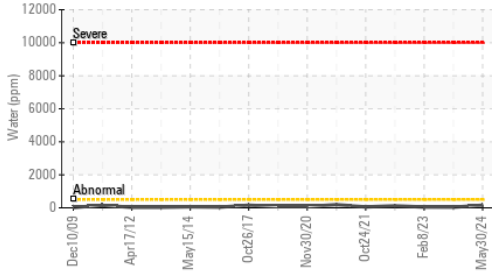
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.34</b>	0.36	0.37

# OIL ANALYSIS REPORT

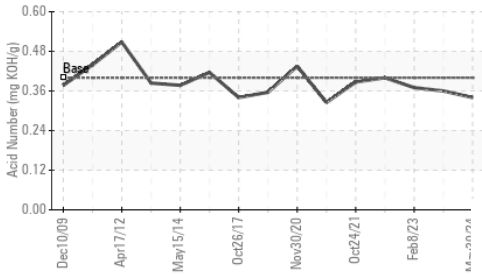
## ▲ Particle Trend



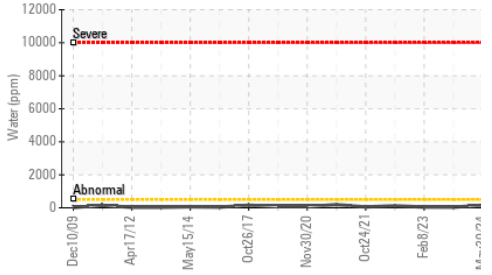
## Water (KF)



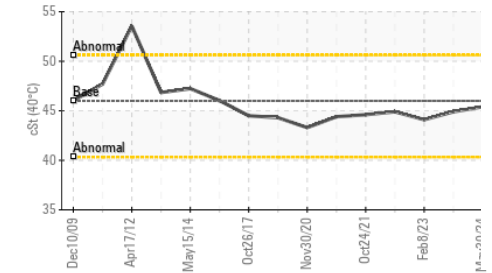
## Acid Number



## Water (KF)



## Viscosity @ 40°C

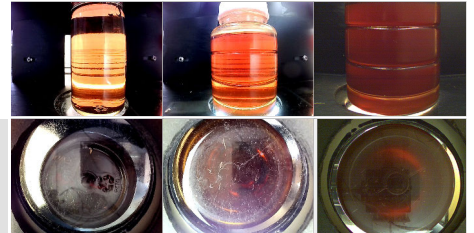


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.4	44.9	44.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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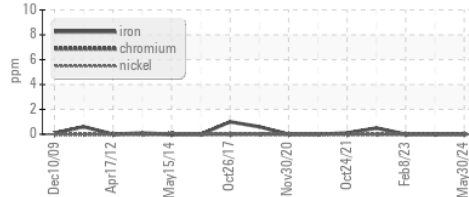
Color



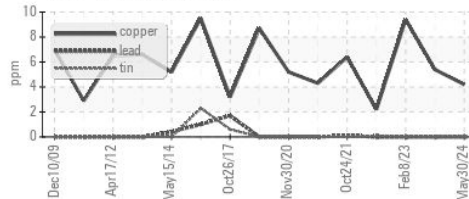
Bottom

## GRAPHS

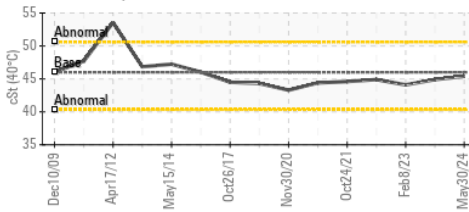
### Ferrous Alloys



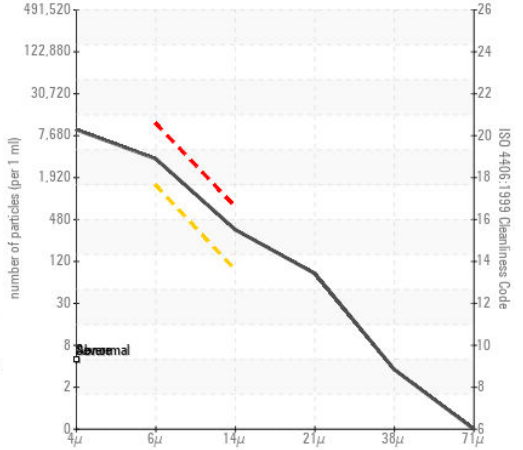
### Non-ferrous Metals



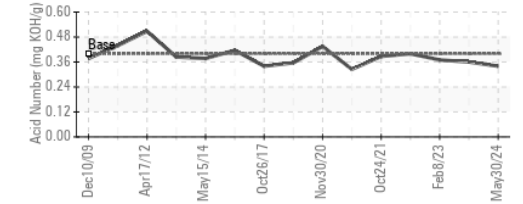
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

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

**Sample No.** : KCPA018030

**Lab Number** : 06207120

**Unique Number** : 11074581

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

**Received** : 11 Jun 2024

**Tested** : 13 Jun 2024

**Diagnosed** : 13 Jun 2024 - Angela Borella

**MAHLE**

5130 N. ST RTE 60 NW

MCCONNELSVILLE, OH

US 43756

Contact: GEORGE MAXWELL

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: