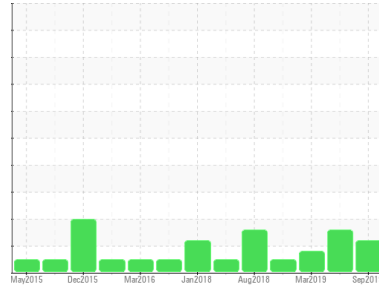




# PROBLEM SUMMARY

## Sample Rating Trend

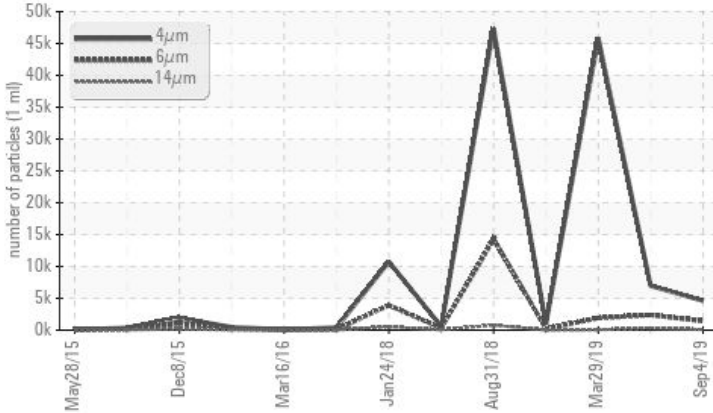
ISO



Area  
**[10664528]**  
 Machine Id  
**KAESER C-1R (S/N 1022)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1436	▲ 2382	▲ 1901
Particles >14µm	ASTM D7647	>80	▲ 91	▲ 296	51
Particles >21µm	ASTM D7647	>20	▲ 22	▲ 88	18
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/18/14	▲ 20/18/15	▲ 23/18/13

Customer Id: WESLONWC  
 Sample No.: WCI2351490  
 Lab Number: 04812122  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 18 Jun 2019 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 29 Mar 2019 Diag: Don Baldrige

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 20 Dec 2018 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

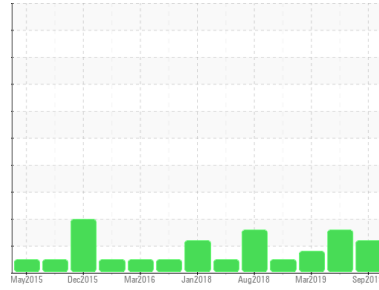
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**[10664528]**  
 Machine Id  
**KAESER C-1R (S/N 1022)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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 moderate 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	history 1	history 2
Sample Number	Client Info		<b>WCI2351490</b>	WC04753361	WCI2327069
Sample Date	Client Info		<b>04 Sep 2019</b>	18 Jun 2019	29 Mar 2019
Machine Age	hrs	Client Info	<b>42936</b>	40128	39275
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	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>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>8</b>	5	6
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<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	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m 90	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>0</b>	0	5
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	<1	5
Zinc	ppm	ASTM D5185m	<b>0</b>	0	12
Sulfur	ppm	ASTM D5185m	<b>12261</b>	16465	15566

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	7	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	1

## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>4609</b>	6965	45861
Particles >6µm	ASTM D7647	>1300	<b>▲ 1436</b>	▲ 2382	▲ 1901
Particles >14µm	ASTM D7647	>80	<b>▲ 91</b>	▲ 296	51
Particles >21µm	ASTM D7647	>20	<b>▲ 22</b>	▲ 88	18
Particles >38µm	ASTM D7647	>4	<b>4</b>	▲ 10	1
Particles >71µm	ASTM D7647	>3	<b>4</b>	2	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 19/18/14</b>	▲ 20/18/15	▲ 23/18/13

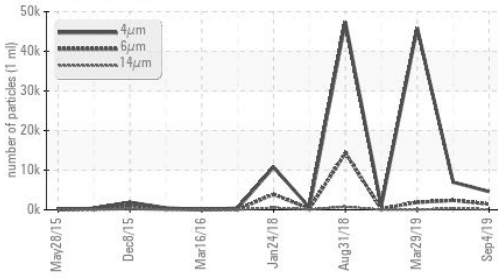
## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.443</b>	0.427	0.481

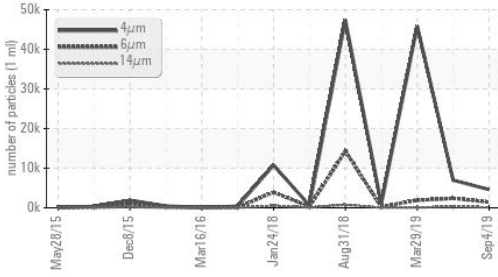


# OIL ANALYSIS REPORT

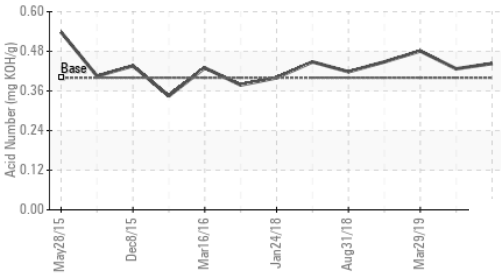
## ▲ Particle Trend



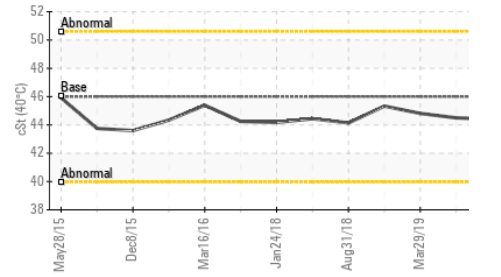
## ▲ Particle Trend



## Acid Number



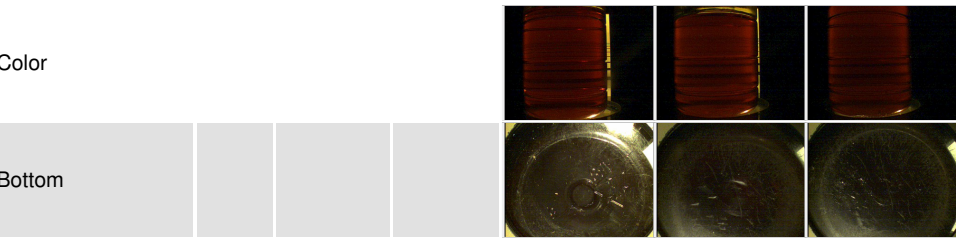
## Viscosity @ 40°C



VISUAL	method	limit/base	current	history 1	history 2
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

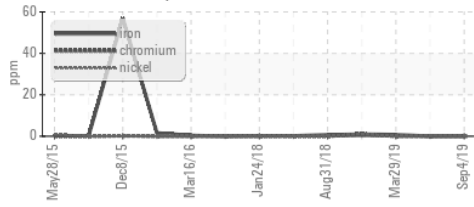
FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	44.5	44.81

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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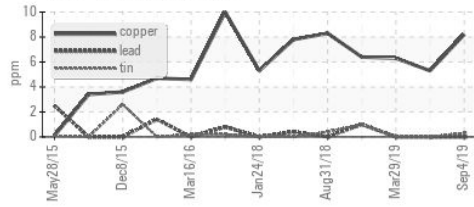


## GRAPHS

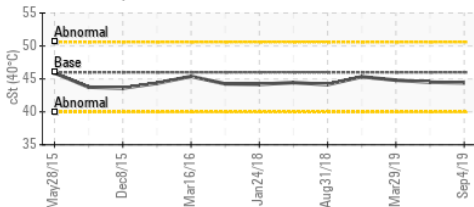
### Ferrous Alloys



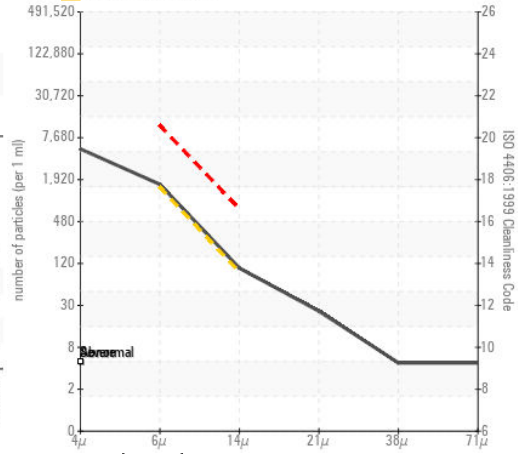
### Non-ferrous Metals



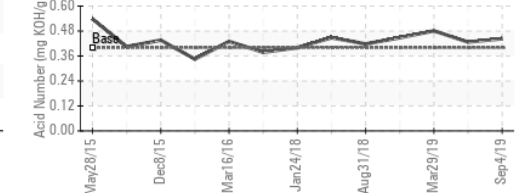
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC12351490 Received : 01 Oct 2019  
 Lab Number : 04812122 Diagnosed : 03 Oct 2019  
 Unique Number : 8761994 Diagnostician : Don Baldrige  
 Test Package : IND 2 ( Additional Tests: 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)

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