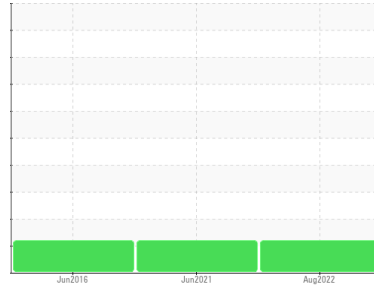


# PROBLEM SUMMARY

Sample Rating Trend



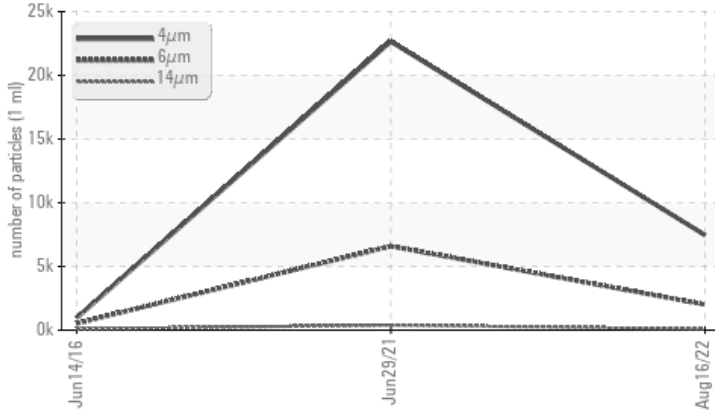
ISO



Machine Id  
**KAESER SM-15 5367851 (S/N 1460)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	ATTENTION
Particles >6µm	ASTM D7647	>1300	▲ <b>2000</b>	▲ 6587	523
Particles >14µm	ASTM D7647	>80	▲ <b>83</b>	▲ 394	▲ 89
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/18/14</b>	▲ 20/16	▲ 16/14

Customer Id: MALELM  
Sample No.: KC105509  
Lab Number: 05625256  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 29 Jun 2021 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. 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



### 14 Jun 2016 Diag: Don Baldrige

ISO



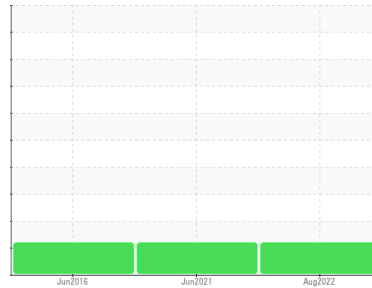
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id  
**KAESER SM-15 5367851 (S/N 1460)**

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 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			<b>KC105509</b>	KC99324	KC50835
Sample Date			<b>16 Aug 2022</b>	29 Jun 2021	14 Jun 2016
Machine Age	hrs		<b>30549</b>	20749	2339
Oil Age	hrs		<b>9800</b>	2121	0
Oil Changed			<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
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>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	3
Copper	ppm	ASTM D5185m >50	<b>5</b>	3	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	2
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	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>	14	<1
Barium	ppm	ASTM D5185m 90	<b>0</b>	4	41
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>46</b>	52	79
Calcium	ppm	ASTM D5185m 2	<b>0</b>	2	4
Phosphorus	ppm	ASTM D5185m	<b>0</b>	11	38
Zinc	ppm	ASTM D5185m	<b>0</b>	6	4

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>14</b>	13	18
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	2
Water	%	ASTM D6304 >0.05	<b>0.009</b>	0.026	0.026
ppm Water	ppm	ASTM D6304 >500	<b>96.8</b>	268.4	260

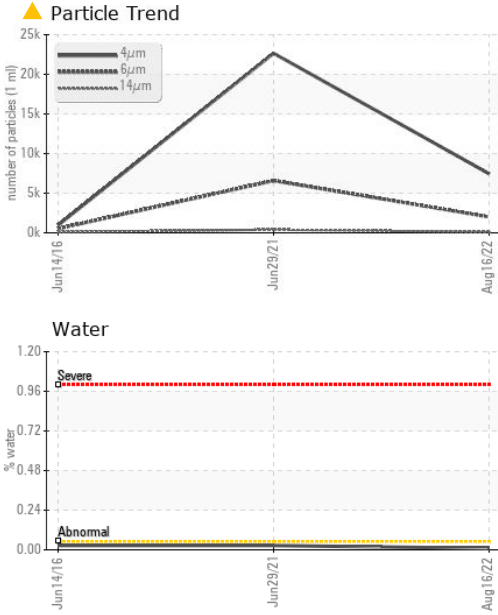
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>7458</b>	22651	961
Particles >6µm	ASTM D7647 >1300		<b>▲ 2000</b>	▲ 6587	523
Particles >14µm	ASTM D7647 >80		<b>▲ 83</b>	▲ 394	▲ 89
Particles >21µm	ASTM D7647 >20		<b>19</b>	▲ 48	▲ 30
Particles >38µm	ASTM D7647 >4		<b>1</b>	2	4
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>▲ 20/18/14</b>	▲ 20/16	▲ 16/14

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.33</b>	0.344	0.378

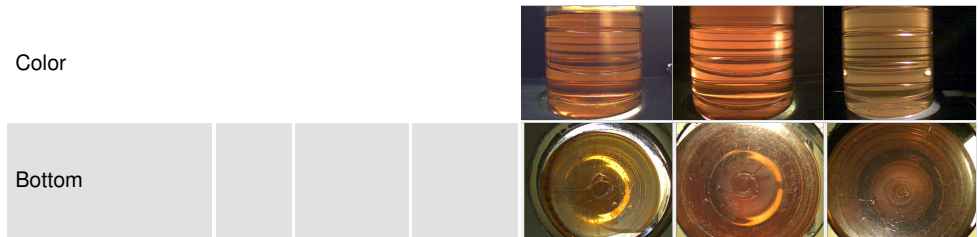
# OIL ANALYSIS REPORT



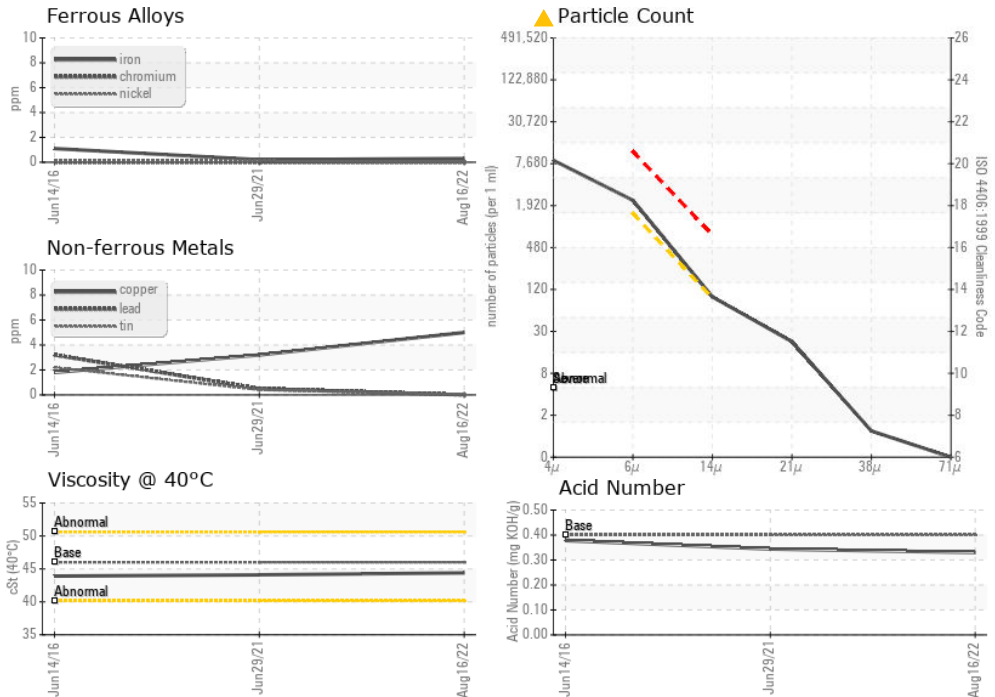
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

PARAMETER	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	44.1	43.91

PARAMETER	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC105509 **Received** : 23 Aug 2022  
**Lab Number** : 05625256 **Diagnosed** : 25 Aug 2022  
**Unique Number** : 10104763 **Diagnostician** : Angela Borella  
**Test Package** : IND 2

**MALL TAIL**  
 397 E 54TH ST  
 ELMWOOD PARK, NJ  
 USA 07407  
 Contact: SERVICE MANAGER

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: