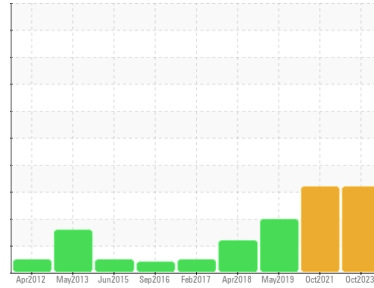




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**



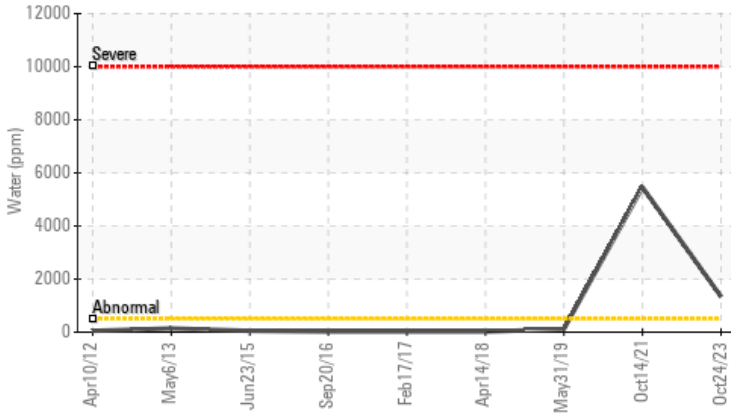
Machine Id  
**KAESER SM 15 4255513 (S/N 1064)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water (KF)



## RECOMMENDATION

We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. There is too much water present in this sample to perform a particle count.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ <b>0.134</b>	▲ 0.546	0.012
ppm Water	ppm	ASTM D6304	>500	▲ <b>1340</b>	▲ 5460	120
Emulsified Water	scalar	*Visual	>0.05	▲ <b>0.2%</b>	0.2%	NEG
Free Water	scalar	*Visual		▲ <b>1.0</b>	NEG	NEG

Customer Id: GFMDAN  
 Sample No.: KCPA004554  
 Lab Number: 05996298  
 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

### 14 Oct 2021 Diag: Doug Bogart

#### WATER



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 31 May 2019 Diag: Angela Borella

#### WEAR



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. An increase in the aluminum level is noted. 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 Apr 2018 Diag: Angela Borella

#### 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 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.

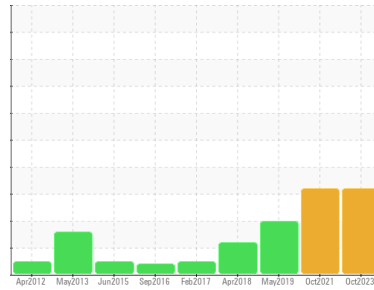
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**KAESER SM 15 4255513 (S/N 1064)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) FG-460 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. There is too much water present in this sample to perform a particle count.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a light concentration of water present in the oil. Free water present.

### Fluid Condition

The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA004554</b>	KCP39268	KCP18955
Sample Date	Client Info		<b>24 Oct 2023</b>	14 Oct 2021	31 May 2019
Machine Age	hrs	Client Info	<b>38816</b>	35325	34159
Oil Age	hrs	Client Info	<b>0</b>	1166	420
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	3	14
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	1	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	5	▲ 13
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	4	3	3
Tin	ppm	ASTM D5185m >10	<1	0	<1
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m 500	166	145	423
Zinc	ppm	ASTM D5185m	144	100	218
Sulfur	ppm	ASTM D5185m	1301	1403	1466

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	2	5
Sodium	ppm	ASTM D5185m	1	<1	<1
Potassium	ppm	ASTM D5185m >20	3	0	<1
Water	%	ASTM D6304 >0.05	▲ 0.134	▲ 0.546	0.012
ppm Water	ppm	ASTM D6304 >500	▲ 1340	▲ 5460	120

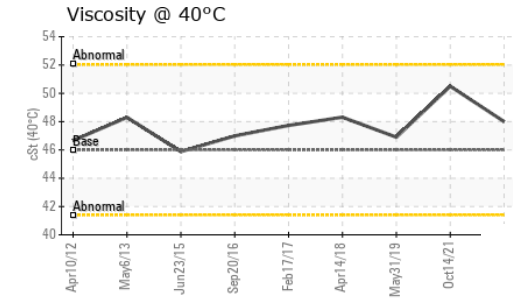
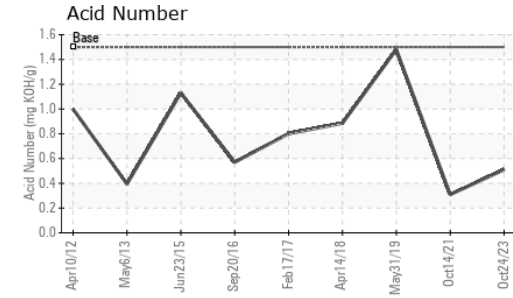
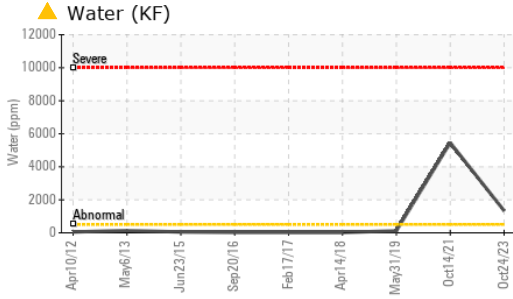
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	7101	103158
Particles >6µm	ASTM D7647	>1300	---	▲ 2096	▲ 42530
Particles >14µm	ASTM D7647	>80	---	▲ 159	▲ 377
Particles >21µm	ASTM D7647	>20	---	▲ 50	▲ 46
Particles >38µm	ASTM D7647	>4	---	▲ 5	3
Particles >71µm	ASTM D7647	>3	---	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	▲ 18/14	▲ 23/16

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	0.51	0.309	1.480

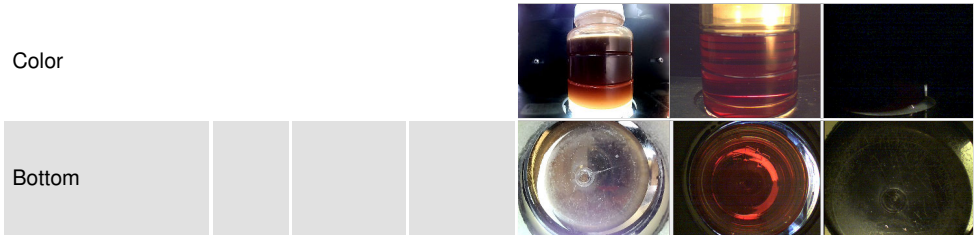
# OIL ANALYSIS REPORT



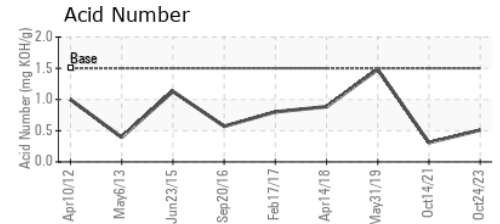
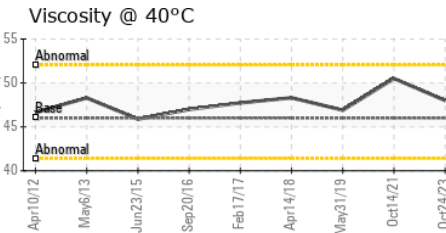
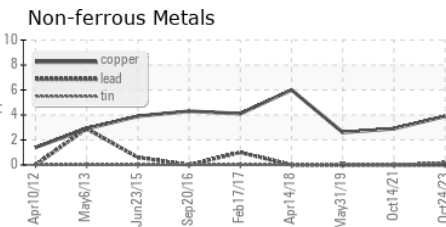
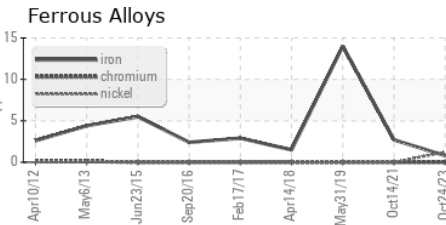
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ <b>0.2%</b>	0.2%
Free Water	scalar	*Visual		▲ <b>1.0</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	<b>48.0</b>	50.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KCPA004554  
 Lab Number : 05996298  
 Unique Number : 10724658  
 Test Package : IND 2 ( Additional Tests: KF, PrtCount )

Received : 01 Nov 2023  
 Diagnosed : 03 Nov 2023  
 Diagnostician : Don Baldrige

**G & F MEDICAL**  
 33 CHERRY HILL DR  
 DANVERS, MA  
 US 01923  
 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: