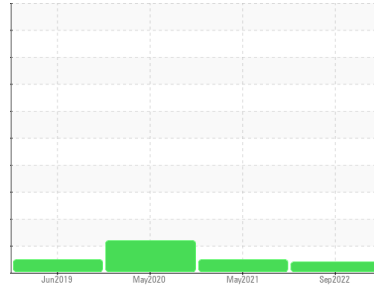


# PROBLEM SUMMARY

Sample Rating Trend



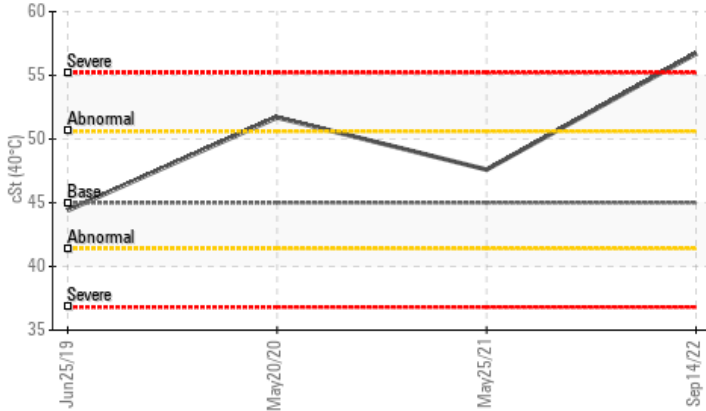
## VISCOSITY



Machine Id  
**KAESER SM 15 6389207 (S/N 1079)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	ATTENTION
Visc @ 40°C	cSt	ASTM D445	45	▲ 56.7	47.6	51.7

Customer Id: GABFAR  
Sample No.: KCP50179  
Lab Number: 05646613  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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

### 25 May 2021 Diag: Don Baldrige

NORMAL



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

view report



### 20 May 2020 Diag: Doug Bogart

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 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



### 25 Jun 2019 Diag: Angela Borella

NORMAL



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. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

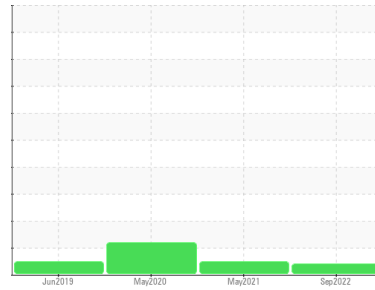
view report



Machine Id  
**KAESER SM 15 6389207 (S/N 1079)**

Component  
**Compressor**

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



**DIAGNOSIS**

▲ **Recommendation**

Oil and filter change at the time of sampling has been noted. 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

▲ **Fluid Condition**

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**

	method	limit/base	current	history 1	history 2
Sample Number			<b>KCP50179</b>	KCP37192	KCP25105
Sample Date			<b>14 Sep 2022</b>	25 May 2021	20 May 2020
Machine Age	hrs		<b>10357</b>	7058	4753
Oil Age	hrs		<b>3299</b>	2305	2105
Oil Changed			<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	NORMAL	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>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	0	1
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >50	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</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 0	<b>0</b>	1	<1
Barium	ppm	ASTM D5185m 90	<b>61</b>	64	64
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 100	<b>78</b>	86	99
Calcium	ppm	ASTM D5185m 0	<b>4</b>	3	3
Phosphorus	ppm	ASTM D5185m 0	<b>4</b>	6	3
Zinc	ppm	ASTM D5185m 0	<b>3</b>	0	0
Sulfur	ppm	ASTM D5185m 23500	<b>24070</b>	18225	18003

**CONTAMINANTS**

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>1</b>	2	1
Sodium	ppm	ASTM D5185m	<b>20</b>	23	31
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	4
Water	%	ASTM D6304 >0.05	<b>0.027</b>	0.022	0.028
ppm Water	ppm	ASTM D6304 >500	<b>277.4</b>	220.6	286.9

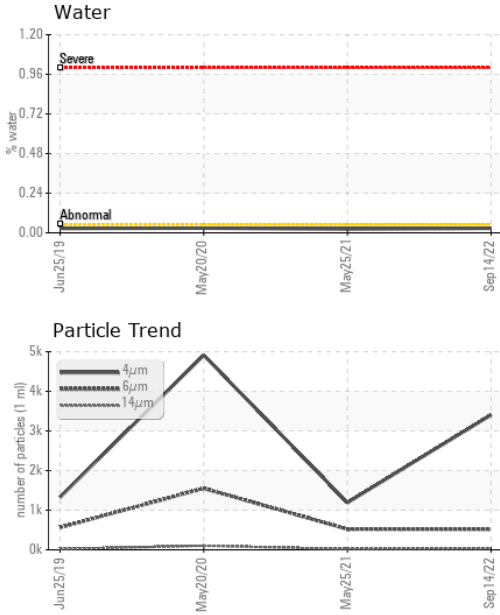
**FLUID CLEANLINESS**

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>3405</b>	1190	4911
Particles >6µm	ASTM D7647	>1300	<b>515</b>	521	▲ 1551
Particles >14µm	ASTM D7647	>80	<b>27</b>	16	▲ 103
Particles >21µm	ASTM D7647	>20	<b>6</b>	2	▲ 24
Particles >38µm	ASTM D7647	>4	<b>0</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/16/12</b>	16/11	▲ 18/14

**FLUID DEGRADATION**

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.38</b>	0.330	0.407

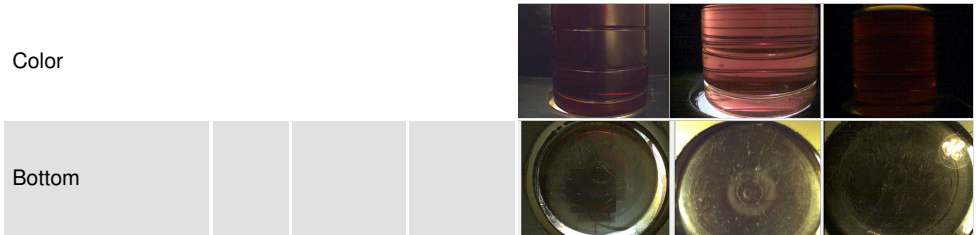
# OIL ANALYSIS REPORT



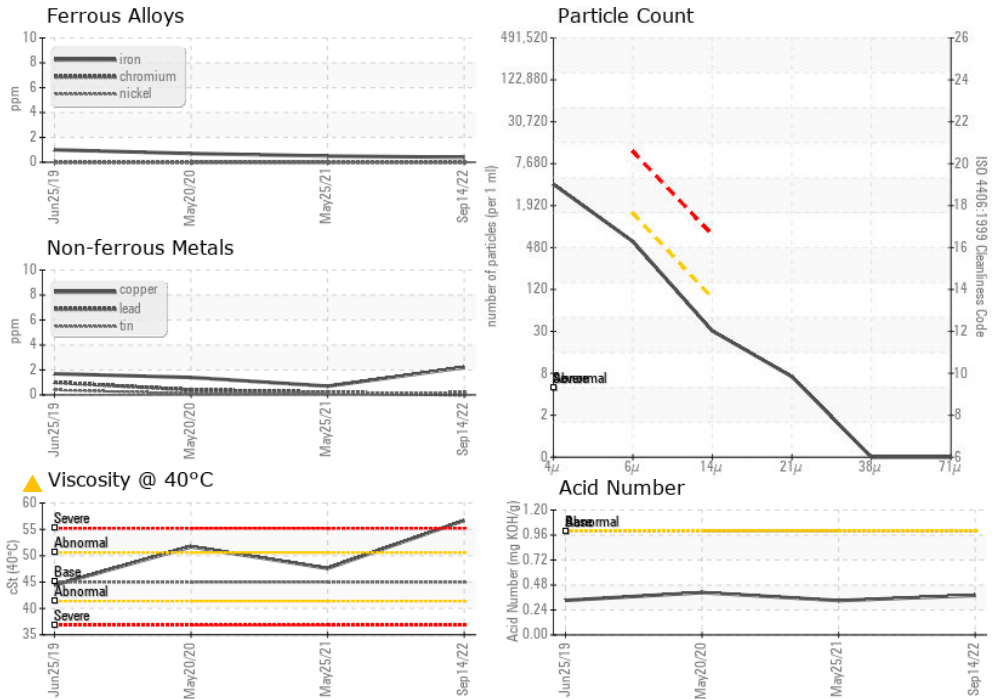
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45 ▲ 56.7	47.6	51.7

SAMPLE IMAGES	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.** : KCP50179 **Received** : 20 Sep 2022  
**Lab Number** : 05646613 **Diagnosed** : 24 Sep 2022  
**Unique Number** : 10141152 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**GABRIEL METAL CASTING**  
 3500 7TH AVE N  
 FARGO, ND  
 USA 58102  
 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: