

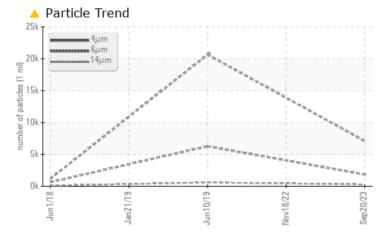
## **PROBLEM SUMMARY**

# KAESER SM 10 5602814 (S/N 1054)

Compressor

KAESER SIGMA (OEM) S-460 (--- GAL)

### COMPONENT CONDITION SUMMARY



#### 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.

#### **PROBLEMATIC TEST RESULTS** Sample Status ABNORMAL ABNORMAL ABNORMAL Particles >6µm ASTM D7647 >1300 **1842** ▲ 6275 Particles >14µm ASTM D7647 >80 286 ▲ 586 ▲ Particles >21µm ASTM D7647 >20 108 **1**64 Particles >38µm ASTM D7647 >4 4 **1**1 **Oil Cleanliness** ISO 4406 (c) >--/17/13 🔺 20/18/15 ▲ 20/16

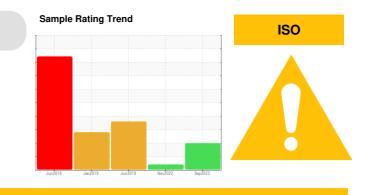
Customer Id: TTBWES Sample No.: KC05996679 Lab Number: 05996679 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Don Baldridge +1 <u>don.b505@comcast.net</u>

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>



There are no recommended actions for this sample.

#### HISTORICAL DIAGNOSIS

#### 18 Nov 2022 Diag: Don Baldridge

VIS DEBRIS



#### to NOV 2022 Diag. Don Baldridge

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



#### 10 Jun 2019 Diag: Don Baldridge

21 Jan 2019 Diag: Jonathan Hester

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. There is a trace of moisture 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 acceptable for the time in service.



#### WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Free water present. High 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.





### **OIL ANALYSIS REPORT**

# KAESER SM 10 5602814 (S/N 1054)

**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

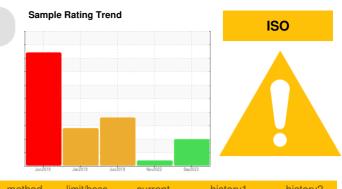
All component wear rates are normal.

#### Contamination

There is a high amount of particulates present in the oil.

#### Fluid Condition

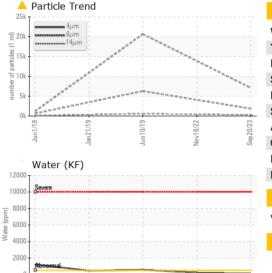
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

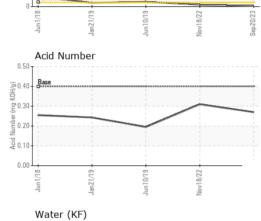


	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC05996679	KC102193	KC77103
Sample Date		Client Info		20 Sep 2023	18 Nov 2022	10 Jun 2019
Machine Age	hrs	Client Info		39585	32622	6745
Oil Age	hrs	Client Info		0	8019	6745
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	2	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	12	11	29
Tin	ppm	ASTM D5185m	>10	0	<1	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	le le roi	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	30	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	90	۰ <1	<1	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus		ASTM D5185m	2	0	63	<1
Zinc	ppm	ASTM D5185m		0	0	0
	ppm	ASTIVI DOTOSITI			U	
		ing a black of	line it /le e e e			
	3	method	limit/base	current	history1	history2
Silicon	S ppm	ASTM D5185m		current 0	history1 <1	history2 <1
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>25	current 0 0	history1 <1 1	history2 <1 0
Silicon Sodium Potassium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	current 0 0 <1	history1 <1 1 <1	history2 <1 0 <1
Silicon Sodium Potassium Water	ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>25 >20 >0.05	current 0 0 <1 0.007	history1 <1 1 <1 0.022	history2 <1 0 <1 ▲ 0.058
Silicon Sodium Potassium Water ppm Water	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>25 >20 >0.05 >500	Current 0 0 <1 0.007 76.4	history1 <1 1 <1 0.022 221.1	history2 <1 0 <1 ▲ 0.058 ▲ 580
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	>25 >20 >0.05	current     0	history1 <1 <1 <1 0.022 221.1 history1	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 <b>method</b> ASTM D7647	>25 >20 >0.05 >500 limit/base	current     0	history1 <1 1 <1 0.022 221.1	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base	current   0   0   <1   0.007   76.4   current   7100   ▲ 1842	history1 <1 <1 <1 0.022 221.1 history1	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655 ▲ 6275
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	current   0   0   <1   0.007   76.4   current   7100   ▲ 1842   ▲ 286	history1 <1 <1 <1 0.022 221.1 history1 	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655 ▲ 6275 ▲ 586
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20	current   0   0   <1   0.007   76.4   current   7100   ▲ 1842   ≥86   ▲ 108	history1 <1 <1 <1 0.022 221.1 history1 	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655 ▲ 6275 ▲ 586 ▲ 164
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current   0   0   <1   0.007   76.4   current   7100   ▲ 1842   ▲ 286   ▲ 108   ▲ 4	history1 <1 1 <1 0.022 221.1 history1 	history2 <1 0 <1 ▲ 0.058 ▲ 580 20655 ▲ 6275 ▲ 6275 ▲ 586 ▲ 164 ▲ 11
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	current   0   0      0.007   76.4   current   7100   1842   286   108   4   0	history1 <1 1 <1 0.022 221.1 history1  	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655 ▲ 6275 ▲ 6275 ▲ 586 ▲ 164 ▲ 11 2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current   0   0   <1   0.007   76.4   current   7100   ▲ 1842   ▲ 286   ▲ 108   ▲ 4	history1 <1 1 <1 0.022 221.1 history1  	history2 <1 0 <1 ▲ 0.058 ▲ 580 20655 ▲ 6275 ▲ 6275 ▲ 586 ▲ 164 ▲ 11
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm % ppm VESS	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	current   0   0      0.007   76.4   current   7100   1842   286   108   4   0	history1 <1 1 <1 0.022 221.1 history1   	history2 <1 0 <1 ▲ 0.058 ▲ 580 history2 20655 ▲ 6275 ▲ 6275 ▲ 586 ▲ 164 ▲ 11 2



## **OIL ANALYSIS REPORT**





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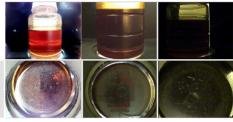
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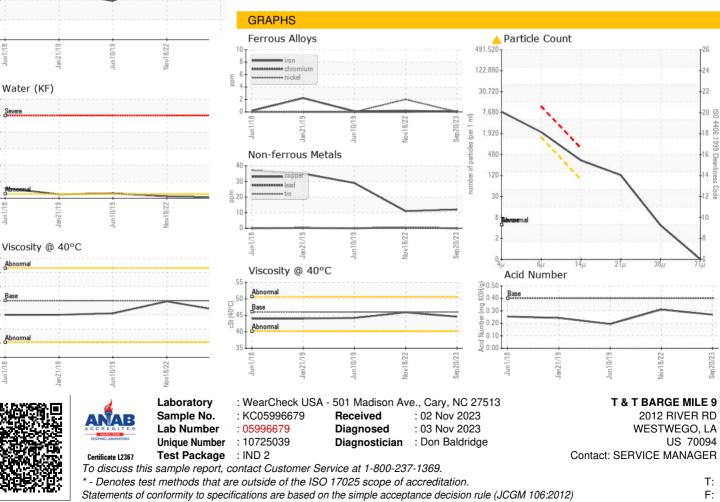
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	🔺 MODER	🔺 MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.6	45.9	44.2
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						



Bottom



Report Id: TTBWES [WUSCAR] 05996679 (Generated: 11/03/2023 17:02:39) Rev: 1

Contact/Location: SERVICE MANAGER ? - TTBWES