

# **PROBLEM SUMMARY**

Sample Rating Trend

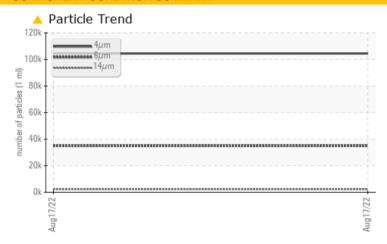
ISO

# KAESER SM11 1643193 - CUSTOMER NOT PROVIDED (S/N 1300)

Compressor

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

#### **COMPONENT CONDITION SUMMARY**



#### 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			ABNORMAL				
Particles >6µm	ASTM D7647	>1300	<b>△</b> 34897				
Particles >14µm	ASTM D7647	>80	<b>2298</b>				
Particles >21µm	ASTM D7647	>20	<b>466</b>				
Particles >38μm	ASTM D7647	>4	<u>^</u> 7				
Oil Cleanliness	ISO 4406 (c)	>/17/13	<u> 24/22/18</u>				

Customer Id: KAEFRE Sample No.: KCP44063 Lab Number: 05628938 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

To change component or sample information: Customer Service +1 1-800-237-1369 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



# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# KAESER SM11 1643193 - CUSTOMER NOT PROVIDED (S/N 1300)

Component

Compressor

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 a high amount of particulates present in the oil.

#### **Fluid Condition**

The AN level is acceptable for this fluid.

				Aug2022		
SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number				KCP44063		
Sample Date				17 Aug 2022		
Machine Age	hrs			52284		
Oil Age	hrs			0		
Oil Changed				Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	<1		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>50	5		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	90	0		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m	100	0		
Calcium	ppm	ASTM D5185m	0	0		
Phosphorus	ppm	ASTM D5185m	0	2		
Zinc	ppm	ASTM D5185m	0	0		
Sulfur	ppm	ASTM D5185m	23500	18587		
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	3		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.05	0.006		
opm Water	ppm	ASTM D6304		62.4		
FLUID CLEANLIN	ESS	method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		104522		
Particles >6µm		ASTM D7647	>1300	<b>4</b> 34897		
Particles >14μm		ASTM D7647	>80	<b>2298</b>		
Particles >21μm		ASTM D7647	>20	<b>466</b>		
Particles >38µm		ASTM D7647	>4	<u>^</u> 7		
Particles >71μm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<u>4</u> 24/22/18		
FLUID DEGRADA	TION	method	limit/base	current	history 1	history 2

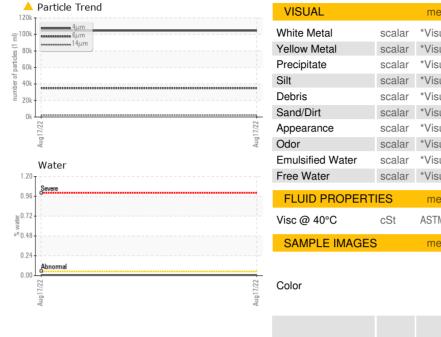
Acid Number (AN)

mg KOH/g ASTM D8045 1.0

0.45



### **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	LIGHT		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	TIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	45	50.3		
SAMPLE IMAGES	S	method	limit/base	current	history 1	history 2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count		
8 iron iron nickel			491,520 122,880 30,720			T26 +24 +22
2			7,680	1		-20 <del>g</del>
Aug17/22			Aug 17/22.  Aug 17/22.  150  150  150	, ,		118 o local illinos.
Non-ferrous Metal	s		d darticle		, )	+16 Cean
copper			120		,	-14 Ess
6			30		\	12 8
4						
2+			8	<b>Sibrese</b> mal		10
7/22			22/7			8
Aug17/22			Aug17/22			\
Viscosity @ 40°C			4	آبِ 6 Acid Number	14μ 21μ	38μ 71μ
Severe			⊋1.20			
Abnormal			(B) 1.20 MOX 0.96 JB 0.72		***************************************	
) - 0			Ĕ0.72	+		



Laboratory Sample No.

Lab Number

: 05628938 : 10113459 **Unique Number** 

ppm

: KCP44063

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Aug 2022 Diagnosed

: 01 Sep 2022 Diagnostician : Doug Bogart **Test Package**: IND 2 (Additional Tests: KF, PrtCount)

Aug17/22

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) KAESER COMPRESSOR

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