

## **PROBLEM SUMMARY**

**Oil Cleanliness** 

# Sample Rating Trend ISO

#### Machine Id 82888843 (S/N 1294) Component

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

#### COMPONENT CONDITION SUMMARY



#### 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 ABNORMAL -- -- Particles >6µm ASTM D7647 >1300 1341 -- -- Particles >14µm ASTM D7647 >80 214 -- -- Particles >21µm ASTM D7647 >20 71 -- -- Particles >38µm ASTM D7647 >4 5 -- --

ISO 4406 (c) >--/17/13 🔺 19/18/15

Customer Id: APTSAN Sample No.: KCP55008 Lab Number: 05978959 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@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**



ISO

#### Machine Id 82888843 (S/N 1294) Component

Compressor

Fluid KAESER SIGMA (OEM) M-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 high amount of particulates present in the oil.

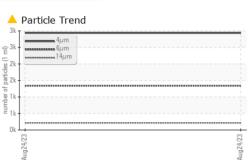
#### **Fluid Condition**

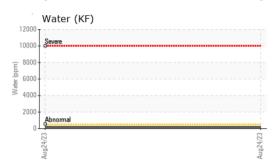
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

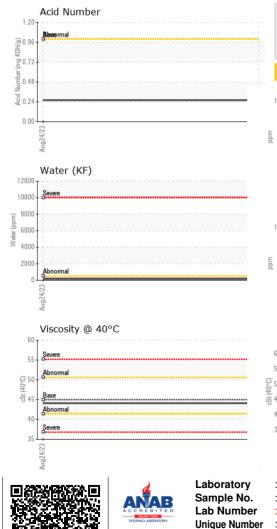
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP55008		
Sample Date		Client Info		24 Aug 2023		
Machine Age	hrs	Client Info		2627		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	6		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>50	8		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium		ASTM D5185m	~10	0		
Cadmium	ppm ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	90	9		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m	0	۰ <1		
Magnesium	ppm	ASTM D5185m	100	44		
Calcium	ppm	ASTM D5185m	0	5		
Phosphorus		ASTM D5185m	0	ر <1		
Zinc	ppm		0	0		
Zinc Sulfur	ppm					
	ppm	ASTM D5185m	23500	16709		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1		
Sodium	ppm	ASTM D5185m		21		
Potassium	ppm	ASTM D5185m	>20	9		
Water	%	ASTM D6304		0.016		
ppm Water	ppm	ASTM D6304	>500	165.1		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2937		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	<u> </u>		
Particles >21µm		ASTM D7647	>20	<u> </u>		
Particles >38µm		ASTM D7647	>4	<b>4</b> 5		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>19/18/15</b>		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2



#### Built for a lifetime."







# **OIL ANALYSIS REPORT**

VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	LIGHT		
				-		
				LIGHT		
				NONE		
	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D445	45	44.1		
SAMPLE IMAGES	;	method	limit/base	current	history1	history
Color					no image	no imag
Bottom					no image	no image
GRAPHS						
Ferrous Alloys			491 520	Particle Count		
8 - iron						
C management nickel			122,880	-		
4			30,720	,		
2						
0				<sup>1</sup>		
g24/2			1,920 g54/2			
			Au cles (p		N	
	5		· · · · · · · · · · · · · · · · · · ·			
8- copper			ja 120	)-		
4			30	1		
2				Berevenal		
0				T		
124/23			j24/2.	4		
			Aug	4u 6u	144 214	38µ 71
				Acid Number	- in city	
Severe				Basermal		
Abnormal			ý 0.96 B	- <del>-</del>		
Base			트 0.72 형 0.42	1		
			10.48 20.34			
35 Severe						
Aug24/23			Aug24/23	Aug24/23		
4						
	Emulsified Water Free Water FLUID PROPERT Visc @ 40°C SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys 10 6 6 10 10 10 10 10 10 10 10 10 10	Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar FLUID PROPERTIES Visc @ 40°C cSt SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys 10 GRAPHS Ferrous Metals 10 Color Non-ferrous Metals 10 Color Severe field Color Co	Precipitate scalar *Visual Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual FLUID PROPERTIES method Visc @ 40°C cSt ASTM D445 SAMPLE IMAGES method Color Bottom GRAPHS Ferrous Alloys Non-ferrous Metals Non-ferrous Metals	Precipitate scalar *Visual NONE Silt scalar *Visual NONE Debris scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.05 Free Water scalar *Visual *0.05 Free Water scalar *Visual *0.05 Free Water scalar *Visual *0.05 Free Water scalar *0 Free Water scalar *0 F	Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE LIGHT Sand/Dirt scalar *Visual NONE NORML Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Codor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.05 Free Water scalar *Visual >0.05 Free Water scalar *Visual *O.05 Free Water Scalar *Visual Scalar *Visual Scalar *Visual Scalar *Visual *O.05 Free Water Scalar *Visual Scalar *Visual *O.05 Scalar *Visual Scalar *Visual *O.05 GRAPHS * Scalar *Visual *O.05 ************************************	Precipitate scalar *Visual NONE NONE Siti scalar *Visual NONE NONE Debris scalar *Visual NONE LIGHT Sand/Dirt scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML Free Water scalar *Visual NORML NORML Free Water scalar *Visual NORML NORML FLUID PROPERTIES method limit/base current history1 Visc @ 40°C cSt ASTM D445 45 44.1 SAMPLE IMAGES method limit/base current history1 Color no image Bottom no image GRAPHS Ferrous Alloys Viscosity @ 40°C

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)

Certificate L2367