

PROBLEM SUMMARY

Sample Rating Trend ISO

KAESER 2046820

Component Compressor Fluid KAESER SIGMA (OEM) M-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 TES	T RESULTS			
Sample Status			ABNORMAL	
Particles >6µm	ASTM D7647	>1300	<u> </u>	
Oil Cleanliness	ISO 4406 (c)	>/17/13	A 23/20/13	

Customer Id: ROCOAKCA Sample No.: KCPA007847 Lab Number: 05981901 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



OIL ANALYSIS REPORT





KAESER 2046820

Component Compressor Fluid KAESER SIGMA (OEM) M-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 silt (particulates < 14 microns in size) present in the oil.

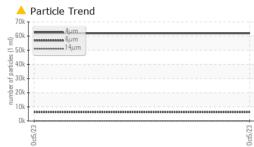
Fluid Condition

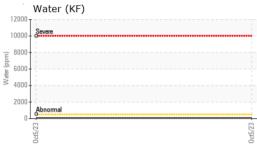
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

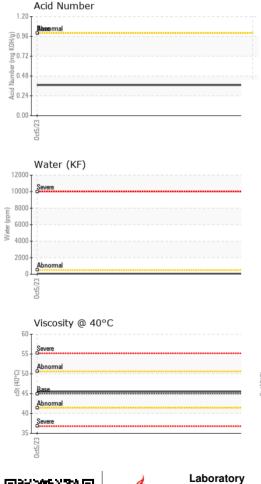
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA007847		
Sample Date		Client Info		05 Oct 2023		
Machine Age	hrs	Client Info		8241		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1		
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	4		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>50	7		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	90	3		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m	100	9		
Calcium	ppm	ASTM D5185m	0	<1		
Phosphorus	ppm	ASTM D5185m	0	3		
Zinc	ppm	ASTM D5185m	0	64		
Sulfur	ppm	ASTM D5185m	23500	18767		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1		
Sodium	ppm	ASTM D5185m		3		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	>0.05	0.006		
ppm Water	ppm	ASTM D6304	>500	67.0		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		61878		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	48		
Particles >21µm		ASTM D7647	>20	8		
Particles >38µm		ASTM D7647	>4	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	23/20/13		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.37		



OIL ANALYSIS REPORT







	VISUAL		method	limit/base	current	history1	history2
	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	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
0ct5/23	Appearance	scalar	*Visual	NORML	NORML		
0	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
	Free Water	scalar	*Visual		NEG		
-	FLUID PROPERT	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	45	45.5		
	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
0ct5/23	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				Particle Count		
	iron 1			491,520	ľ		I ²
	chromium			122,880	-		-2
				30,720	N		-2
	2			50,720			ľ
	0			7,680			-2
	0ct5/23			0ct5/23 per 1 ml)			+1
	∝ Non-ferrous Meta	le.		EC/2520 1.920 120 120 120		N	-1
	¹⁰ T			to	· · · · · · · · · · · · · · · · · · ·		
	8 - copper				1	1	-1
	E 6- min tin			2 30			-1
	ā 4-				******		
	2			8	Bibrevernal		

				23	+		**************************************
	0 ct5/23			0ct5/23			
	Viscosity @ 40°C			0ct5/23	4μ 6μ	14μ 21μ	38µ 71µ
	Viscosity @ 40°C			C	4μ 6μ Acid Number	14μ 21μ	38µ 71µ
	Viscosity @ 40°C			C	4μ 6μ Acid Number	14μ 21μ	38µ 71µ
	Viscosity @ 40°C			C	4μ 6μ Acid Number	14μ 21μ	38µ 71µ
	Viscosity @ 40°C			C	4μ 6μ Acid Number	14μ 21μ	
	Viscosity @ 40°C			C	4μ 6μ Acid Number	14μ 21μ	
	Viscosity @ 40°C			(0,1.20 (0,10,0.96 (0,10,0.96 (0,0.72 (0,0.72 (0,0.72) (0,0.72) (0,0.72) (0,0.72) (0,0.72) (0,0.72) (0,0.72) (0,0.96) (0	Acid Number	14μ 21μ	
Laboratory Sample No.	Viscosity @ 40°C	Received	d :17 (ry, NC 27513 Doct 2023	Acid Number	CHA VALLEY E 1198 WAR	ENTERPRIS
Laboratory	Viscosity @ 40°C	Received Diagnos Diagnost	d : 17 (ed : 19 (tician : Dor	(a) 1.2(Hoy 0.9(W 0.9(W 0.9(0.72 W 0.04(0.00 C Y 0.0(ry, NC 27513	Acid Number	CHA VALLEY E 1198 WAR	
Laboratory Sample No. Lab Number	Viscosity @ 40°C	Received Diagnos Diagnost ests: KF,	d : 17 (ed : 19 (tician : Dor PrtCount)	ry, NC 27513 Dct 2023 Dct 2023 Dct 2023	Acid Number	CHA VALLEY E 1198 WAR Contact: Se	ENTERPRIS INERVILLE I OAKDALE, (

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: