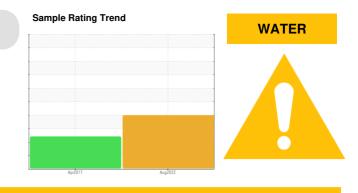


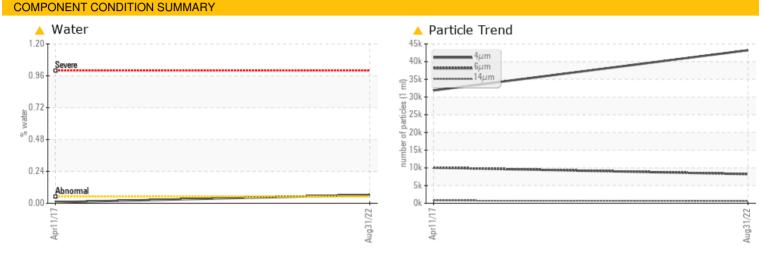
PROBLEM SUMMARY

Machine Ic KAESER CS 90 1439524 (S/N 753410) Component

Compressor







RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

THOBELMATIC LEST NESDETS									
Sample Status				ABNORMAL	ABNORMAL				
Water	%	ASTM D6304	>0.05	A 0.063	0.008				
ppm Water	ppm	ASTM D6304	>500	632.3	80				
Particles >6µm		ASTM D7647	>1300	<u> </u>	1 0061				
Particles >14µm		ASTM D7647	>80	626	A 770				
Particles >21µm		ASTM D7647	>20	<u> </u>	A 211				
Particles >38µm		ASTM D7647	>4	<u> </u>	A 31				
Particles >71µm		ASTM D7647	>3	<u> </u>	<u> </u>				
Oil Cleanliness		ISO 4406 (c)	>/17/13	A 23/20/16	🔺 21/17				

Customer Id: AMGBALCT Sample No.: KCP50294 Lab Number: 05638105 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 ihester@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



11 Apr 2017 Diag: Don Baldridge

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





OIL ANALYSIS REPORT

Built for a lifetime.

Machine Id KAESER CS 90 1439524 (S/N 753410) Component

Compressor

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

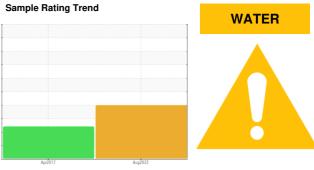
All component wear rates are normal.

Contamination

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

Fluid Condition

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



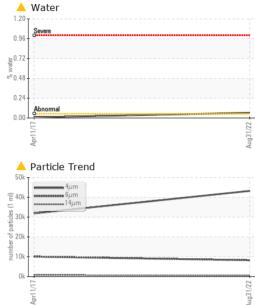
SAMPLE INFORM	ATION	method	limit/base	current	history 1	history 2
Sample Number				KCP50294	KCP71674	
Sample Date				31 Aug 2022	11 Apr 2017	
Machine Age	hrs			123447	105993	
Oil Age	hrs			17454	0	
Oil Changed				Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	1	<1	
Chromium	ppm	ASTM D5185m		0	0	
Nickel		ASTM D5185m	>3	2	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm		>3 >2	-	0	
	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m		0	0	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m		3	5	
Tin	ppm	ASTM D5185m	>10	<1	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		<1	0	
Barium	ppm	ASTM D5185m	90	2	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m	90	47	0	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus	ppm	ASTM D5185m		2	0	
Zinc	ppm	ASTM D5185m		24	0	
Sulfur	ppm	ASTM D5185m		17185	4816	
CONTAMINANTS	;	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	<1	1	
Sodium	ppm	ASTM D5185m		8	<1	
Potassium	ppm	ASTM D5185m	>20	1	<1	
Water	%	ASTM D6304	>0.05	0.063	0.008	
ppm Water	ppm	ASTM D6304	>500	▲ 632.3	80	
FLUID CLEANLIN	IESS	method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		43222	31879	
Particles >6µm		ASTM D7647	>1300	<u> </u>	▲ 10061	
Particles >14µm		ASTM D7647	>80	▲ 626	▲ 770	
Particles >21µm		ASTM D7647		▲ 213	▲ 211	
Particles >38µm		ASTM D7647 ASTM D7647	>4	▲ 18	▲ 31	
Particles >71µm		ASTM D7647 ASTM D7647		▲ 3	▲ 21	
Oil Cleanliness		ISO 4406 (c)	>/17/13	3 3 3 3 4 23/20/16	▲ 21/17	
		()				
FLUID DEGRADA	TION	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.49	0.326	

Acid Number (AN) Report Id: AMGBALCT [WUSCAR] 05638105 (Generated: 09/14/2022 09:08:25)

Contact/Location: SERVICE MANAGER ? - AMGBALCT



OIL ANALYSIS REPORT



	VISUAL		method	limit/base	current	history 1	history 2
	White Metal	scalar	*Visual	NONE	NONE	LIGHT	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	LIGHT	LIGHT	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Aug31/22	Appearance	scalar	*Visual	NORML	NORML	NORML	
Aug	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPERT	FIES	method	limit/base	current	history 1	history 2
	Visc @ 40°C	cSt	ASTM D445	46	45.63	46.9	
	SAMPLE IMAGES	S	method	limit/base	current	history 1	history 2
Aug31/22	Color						no image
	Bottom						no image
	GRAPHS						
	Ferrous Alloys				Particle Count	-	
	¹⁰ T			491,520			T ²
	8 - iron			122,880			-2
	e 6						
	2			30,720			+2
				7,680	No.		-2
	11/17			Aug31/22 \$ (per 1 ml 026'1			1
	Apr1			es (pe			1
	Non-ferrous Metal	s		pited 480			
	10 8 copper			.22/15guA 1000 1500 1500 1500 1500 1500 1500 150			+1
	C anonananan lead			nm			1
	4			30.			
	2			8	Sibreve mal		
					,		
	Apr11/17			Aug31/22			+8
				Aul Aul	и <u>6</u> μ	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Number	- F	- <i>P</i>
	Abnormal			(B) 0.50	Base		
Ę.	50 - 9			Q 0.40	- 0		********************
- U0	E 45			E 0.30			
ç	³ 40 - Abnormal			(0.50) (0.30) (0			
	35						
					Apr11/17-		
	Apr11/1			Aug31/22	Apr		
Laboratory Sample No. Lab Number		501 Madi Received Diagnos	d : 09 \$	ry, NC 27513 Sep 2022 Sep 2022			H PACKAGIN APERMILL F BALTIC, (

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

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