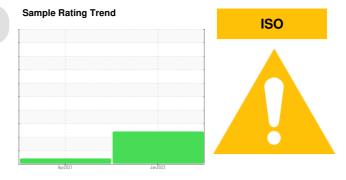


PROBLEM SUMMARY



Machine Id 2350965 (S/N 1034) 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

THOBELIN THO TEOT HE	00210				
Sample Status			ABNORMAL	ABNORMAL	
Particles >6µm	ASTM D7647	>1300	<u> </u>		
Particles >14µm	ASTM D7647	>80	A 205		
Particles >21µm	ASTM D7647	>20	<u> </u>		
Particles >38µm	ASTM D7647	>4	<u> </u>		
Particles >71µm	ASTM D7647	>3	<u> </u>		
Oil Cleanliness	ISO 4406 (c)	>/17/13	A 21/19/15		

Customer Id: PACTRA Sample No.: KCP54328 Lab Number: 05752905 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

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

RECOMMENDED A	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



27 Apr 2021 Diag: Doug Bogart

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. 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 suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id 2350965 (S/N 1034)

Component Compressor

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

DIAGNOSIS

A 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.

			Apr2021	Jan2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP54328	KCP32994	
Sample Date		Client Info		17 Jan 2023	27 Apr 2021	
Machine Age	hrs	Client Info		113000	100467	
Oil Age	hrs	Client Info		3000	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m		<1	0	
Lead		ASTM D5185m	>10	0	<1	
	ppm	ASTM D5185m		7	5	
Copper	ppm					
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	90	1	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	100	26	0	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	0	24	2	
Zinc	ppm	ASTM D5185m	0	25	0	
Sulfur	ppm	ASTM D5185m	23500	22960	11155	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	11	2	
Sodium	ppm	ASTM D5185m		8	<1	
Potassium	ppm	ASTM D5185m	>20	0	0	
Water	%	ASTM D6304		0.012	0.018	
ppm Water	ppm	ASTM D6304	>500	125.0	187.9	
FLUID CLEANLIN		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		11414		
Particles >6µm		ASTM D7647	>1300	A 2931		
Particles >14µm		ASTM D7647	>80	▲ 205		
Particles >21µm		ASTM D7647		▲ 70		
Particles >38µm		ASTM D7647	>4	▲ 12		
Particles >71µm		ASTM D7647		▲ 7		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<pre>^ /</pre>		
FLUID DEGRADA		method	limit/base		history1	history2
				current	history1	TISLUTY2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.35 Contact/Location	0.676	

Report Id: PACTRA [WUSCAR] 05752905 (Generated: 11/27/2023 08:29:36) Rev: 1

Contact/Location: ANTHONY REYES - PACTRA

Page 3 of 4



12000

8000 Water (ppm)

(B/H0.96 KOH/8) ₽°0.72

Pi 0.24 0.00

12000

10000 Severe

800 muu 6000 Water (

Severe 10000

nber of particles (1 ml)

Built for a lifetime."

OIL ANALYSIS REPORT

	V	/ISUAL		method	limit/base	current	histo
4μm 6μm	W	hite Metal	scalar	*Visual	NONE	NONE	NON
лилилил 14µm	Ye	llow Metal	scalar	*Visual	NONE	NONE	NON
		ecipitate	scalar	*Visual	NONE	NONE	NON
	Sil		scalar	*Visual	NONE	NONE	NON
		bris	scalar	*Visual	NONE	LIGHT	A MOD
	Sa	Ind/Dirt	scalar	*Visual	NONE	NONE	NON
		pearance	scalar	*Visual	NORML	NORML	NOR
	Ap Oc	•	scalar	*Visual	NORML	NORML	NOR
		nulsified Water	scalar	*Visual	>0.05	NEG	NEG
ater (KF)	Fre	ee Water	scalar	*Visual		NEG	NEG
ere	F	LUID PROPER	TIES	method	limit/base	current	hist
		sc @ 40°C	cSt	ASTM D445	45	48.3	51.1
		SAMPLE IMAGE	S	method	limit/base	current	his
			U				
nomal		1					
	Jan 17/23 Co	blor					
id Number							
	Во	ottom					
æermal							
							1997
						Deutlist C	
	н 10то	errous Alloys			491,52	Particle Count 20 T	
	8-	iron					
	<u></u> 6 - 6	nickel			122,88	101	
	udd 4-				30,72	20 -	
ater (KF)	2-				7,68	80	
	0		**************	**********************		1	
ere	Anr77/71				Jan 17/23 s (per 1 ml	20-	
	Ν	lon-ferrous Meta	ls		of particles (per 1 ml)	80-	
	¹⁰ T					20	1
	8 -	copper lead			12 unmber	20 -	1
	udd 4	tin				30 -	
normal	4					8	
						⁸ Berwemal	
	Anr77/01	4			Jan 17/23	2-	
scosity @ 40°C	Anr?				Jan1	0	14
		/iscosity @ 40°C				^{4μ} 6μ Acid Number	14μ
ere	60 55	Severe			2.0 2.0 (0 0.1 0.0 0.0 0.0 0.0 0 (0 0.0 0.0	20 Basermal	
zormal	001	<u>Abnormal</u>			ý O.S	36 -	
	ê 30	Base			<u>E</u> 0.1	/2	
normal	40-5	Abnormal			- 4 0.4 N 0.2	10	
ere	35	Severe			Acid		
	2 2 10/2/01	4			Jan17/23	Apr27/21	
	.C.1				1	pr2	

380

history2

history2

history2

no image

no image

0SI

1999 Cle

18 18

14

lan

Certificate L2367

Unique Number : 10312509

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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.

Diagnostician : Angela Borella