

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id **KAESER A/C SM 10 2979216 (S/N 1147)**

Component Compressor

Fluid 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 moderate 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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA020833		
Sample Date		Client Info		28 Jun 2024		
Machine Age	hrs	Client Info		36039		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
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	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m		3		
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	0		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese		ASTM D5185m	0	0		
Magnesium	ppm	ASTM D5185m	100	2		
-	ppm			0		
Calcium	ppm	ASTM D5185m				
Phosphorus	ppm	ASTM D5185m	0	71		
Zinc	ppm	ASTM D5185m		10		
Sulfur	ppm	ASTM D5185m	23500	17404		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1		
Sodium	ppm	ASTM D5185m		8		
Potassium	ppm	ASTM D5185m	>20	1		
Water	%	ASTM D6304		0.006		
ppm Water	ppm	ASTM D6304	>500	65		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		6216		
Particles >6µm		ASTM D7647	>1300	<mark> </mark> 1843		
Particles >14µm		ASTM D7647	>80	71		
Particles >21µm		ASTM D7647	>20	9		
Particles >38µm		ASTM D7647	>4	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	20/18/13		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.30		

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Particle Trend	VISUAL		method	limit/base	current	history1	history2
6k - 4µm	White Metal	scalar	*Visual	NONE	NONE		
5k - 14µm	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
3k -	Silt	scalar	*Visual	NONE	NONE		
2k	Debris	scalar	*Visual	NONE	NONE		
)k	Sand/Dirt	scalar	*Visual	NONE	NONE		
		scalar	*Visual	NORML	NORML		
Jun 28/24	Appearance Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
Water (KF)	Free Water	scalar	*Visual		NEG		
00 - <mark>Severe</mark>	FLUID PROPE		method	limit/base	current	history1	history2
- 00	Visc @ 40°C	cSt	ASTM D445	45	46.8		
10	SAMPLE IMAG					history1	history?
0	SAMPLE IMAG	125	method	limit/base	current	history1	history2
0 Annoma	tolor					no image	no image
Acid Number	Bottom					no image	no image
36 - 0 772 -	GRAPHS						
18	Ferrous Alloys				Particle Count		
24	10 _T			491,52			T ²⁶
	8 - iron			100.00			
				122,88	U-		-24
Jun28/24	<u> </u>			30,72	D -		-22
Water (VE)	2			7,68			-20
Water (KF)	24 0						+20 +18 +16 +14
Severe	Jun 28/24			Jun28/24 s (per 1 ml			-18
0	Non-ferrous Me	tale		r sapjų 48		`	10
0	10 _T :			of par			10
10	8 - copper			Jun 28/24 16 particles (per 1 ml) 8	0		-14
10				2 3			+12
Abnormal	^{ti} 4						
\$254 T u	2				⁸ Bisrese mal		-10
Jun 28/24	25 0			24	2-		-8
	un28/2			Jun28/24			
Viscosity @ 40°C	,	ic.		Γ,	0. 4μ 6μ	14µ 21µ	38µ 71µ
Severe	Viscosity @ 40°	· · · · · · · · · · · · · · · · · · ·		1.2	Acid Number		
	55 - Severe			(B)HO 0.9	Basermal		
0 + Abnormal	S 50 - Abnormal			g 0.3 E 0.7	2		
50 - Base	345 Base				8		
Abnormal	40 Abnormal			4.0.4 W PO24 V O.2 V O.0	4		
evere	35 Severe						
25	10,28/24			Jun28/24	Jun 28/24		
Jun 28/24	,un L			Jun	Jun.		
Samuela Samuela Samuela Samuela S	ratory : WearCheck USA - ole No. : KCPA020833 Number : 06235977 e Number : 11124811 Package : IND 2 (Additional 7	Rece Teste Diagr Fests: KF, F	ived : 15 ed : 16 nosed : 17 PrtCount)	5 Jul 2024 5 Jul 2024 Jul 2024 - Don		A	SOURCES IN 2136 E FM 91 LVARADO, T US 7600 ervice Manage
	le report, contact Customer Se ods that are outside of the ISC						т

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