

OIL ANALYSIS REPORT



Machine Id 8658112 (S/N 1208) Component

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

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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	history1	history2
Sample Number		Client Info		KCPA009997		
Sample Date		Client Info		10 Nov 2023		
Machine Age	hrs	Client Info		489		
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	0		
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		<1		
Tin	ppm	ASTM D5185m	>10	<1		
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	1		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	100	32		
Calcium	ppm	ASTM D5185m	0	<1		
Phosphorus	ppm	ASTM D5185m	0	<1		
Zinc	ppm	ASTM D5185m	0	4		
Sulfur	ppm	ASTM D5185m	23500	21306		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0		
Sodium	ppm	ASTM D5185m		4		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	>0.05	A 0.166		
ppm Water	ppm	ASTM D6304	>500	1660		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1209		
Particles >6µm		ASTM D7647	>1300	659		
Particles >14µm		ASTM D7647	>80	— 112		
Particles >21µm		ASTM D7647	>20	<mark>)</mark> 38		
Particles >38µm		ASTM D7647	>4	6		
Deutieles 71.000		ASTM D7647	>3	1		
Particles >71µm			11-110			
Oil Cleanliness		ISO 4406 (c)	>/17/13	— 17/17/14		
		ISO 4406 (c) method	>/17/13 limit/base	current	history1	history2



Built for a lifetime."

OIL ANALYSIS REPORT

F	VISUAL		method	limit/base	current	history1	history2
Severe	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		
Abnomal	Sand/Dirt	scalar	*Visual	NONE	NONE		
)/23 +	Appearance	scalar	*Visual	NORML	NORML		
Nov10/23 Nov10/23	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	0.2%		
Particle Trend	Free Water	scalar	*Visual	20.00	NEG		
4μm	FLUID PROPER			line it /le e e e			
14μm			method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	45	43.4		
	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Nov10/23 -	Color					no image	no image
Particle Trend 4μm 6μm 14μm	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys				Particle Count		
	¹⁰ T			491,520	1		T ²⁶
	8 - iron chromium			122,880			-24
Nav10/23	e 6						
Nov	[₽] 4-			30,720	+		-22
Acid Number	2			7,680	•		-20
	33						-18 -18 -16 -14
Absenmal	Vov10/23			Nov10/23- 1001 [per 1 m]) 800			-18
	-	1-		I I I I I I I I I I I I I I I I I I I		N	10
	Non-ferrous Meta	IS		91 480			10
	8 - copper			jo jo jo jo jo jo jo jo jo jo jo jo jo j	-		-14
	E 6-			E 30			-12
				50			12
	2			8	Bioreve mal		10
CC. n 10/23							
N a	Nov1 0/2			Nov10/2			N°
Viscosity @ 40°C				N O	u 6u	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Number	- <i>p</i>	and the
	L. C.			(B/HO) 0.96			
Severe	Severe			호 0.96 로 0.72	-		
Severe Abnormal	55 - Severe Starso Abnormal			E 0 72	1		
Severe Abnormal Base	JJ			 5	I		
Severe	(2) 50 - Abnormal (3) 50 - Base (4) 45 - Base			 ਵ 0.48			
Base	G 50 - Abnormal G 50 - Abnormal 40 - Severe			4 0.48			
Base	Abnormal Abnormal 40 35 Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal			40.48 40.24 10.24 V 0.00	23		
Base Abnormal Severe	Abnormal Abnormal Abnormal Abnormal Severe 35 EZ0			40.48 40.24 10.24 V 0.00	lov10/23		
Base Abnormal Severe	Abnormal Abnormal Base Abnormal Severe)1 Madiso	n Ave Carv	0.048 Who can be cardinated as a cardinate of the cardina	Nav10/23	SIMPLE MAN	UFACTURIN
Base Abnormal Severe	Abnormal Abnormal Abnormal Abnormal Severe 35 EZ0)1 Madisc Rece		0.048 Who can be cardinated as a cardinate of the cardina	Nov10/23	SIMPLE MAN 460	
COULON COULON	Abnormal Abnormal Base Abnormal Severe Se		ived : 20	20, NC 27513	Nov10/23	460	0 SE 59TH S OMA CITY, C
Anorma Abnoma	Base Base Base Base Base Base Base Severe	Recei Teste Diagr	ived : 20 ed : 27 nosed : 27	r, NC 27513) Mar 2024	Novi	460 OKLAH	0 SE 59TH 8 DMA CITY, 0 US 731
ECOURD Abnormal	Base Base Base Base Base Base Base Comma Severe	Recei Teste Diagr sts: KF, P	ived : 20 ed : 27 nosed : 27 PrtCount)	r, NC 27513) Mar 2024 7 Mar 2024 Mar 2024 - Jonath	Novi	460 OKLAH	0 SE 59TH S DMA CITY, C US 7313
COUNT Abnommal	: WearCheck USA - 50 : KCPA009997 : 06123626 r : 10937777 : IND 2 (Additional Te t, contact Customer Serv	Recei Teste Diagr sts: KF, P vice at 1-8	ived : 20 ed : 27 nosed : 27 PrtCount) 800-237-1368	r, NC 27513) Mar 2024 7 Mar 2024 Mar 2024 - Jonath 9.	Novi	460 OKLAH	UFACTURIN 10 SE 59TH S DMA CITY, C US 7313 ervice Manag