

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

5985750 (S/N 1069)

Component 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 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.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		KCPA012387	KCP35149			
Sample Date		Client Info		06 May 2024	27 Jan 2022			
Machine Age	hrs	Client Info		11387	1254			
Oil Age	hrs	Client Info		0	1600			
Oil Changed		Client Info		N/A	Changed			
Sample Status				ABNORMAL	ABNORMAL			
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	0	1			
Chromium	ppm	ASTM D5185m	>10	0	0			
Nickel	ppm	ASTM D5185m	>3	0	0			
Titanium	ppm	ASTM D5185m	>3	0	<1			
Silver	ppm	ASTM D5185m	>2	0	<1			
Aluminum	ppm	ASTM D5185m	>10	0	2			
Lead	ppm	ASTM D5185m	>10	0	<1			
Copper	ppm	ASTM D5185m		11	7			
Tin	ppm	ASTM D5185m	>10	<1	<1			
Antimony	ppm	ASTM D5185m	210		<1			
Vanadium	ppm	ASTM D5185m		0	0			
Cadmium		ASTM D5185m		0	0			
	ppm	ASTIVI DOTODIII		U	-			
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	0	<1			
Barium	ppm	ASTM D5185m	90	<u> </u>	0			
Molybdenum	ppm	ASTM D5185m	0	0	0			
Manganese	ppm	ASTM D5185m		0	<1			
Magnesium	ppm	ASTM D5185m	100	<u> </u>	67			
Calcium	ppm	ASTM D5185m	0	0	3			
Phosphorus	ppm	ASTM D5185m	0	0	12			
Zinc	ppm	ASTM D5185m	0	0	3			
Sulfur	ppm	ASTM D5185m	23500	22418	16686			
CONTAMINANTS		method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	<1	1			
Sodium	ppm	ASTM D5185m		4	18			
Potassium	ppm	ASTM D5185m	>20	1	3			
Water	%	ASTM D6304	>0.05	0.006	0.016			
ppm Water	ppm	ASTM D6304	>500	62	166.5			
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647		3310	36012			
Particles >6µm		ASTM D7647	>1300	869	<u> </u>			
Particles >14µm		ASTM D7647	>80	60	<u> </u>			
Particles >21µm		ASTM D7647	>20	15	A 36			
Particles >38µm		ASTM D7647	>4	1	3			
Particles >71μm		ASTM D7647	>3	0	0			
Oil Cleanliness		ISO 4406 (c)	>/17/13	19/17/13	2 0/15			
FLUID DEGRADA	TION	method	limit/base	current	history1	history2		
Acid Number (AN) 08:44) Rev: 1	mg KOH/g	ASTM D8045	1.0	0.33 0.32 Contact/Location: JOSH NEWMAN - IDTFRE				

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Water (KF)		VISUAL		method	limit/base	current
12000						
10000		White Metal	scalar	*Visual	NONE	NONE
(m. 8000	1	Yellow Metal	scalar	*Visual *Visual	NONE	-
radia (0000 + 00000 + 00000 + 00000 + 0000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 000000		Precipitate	scalar			NONE
< 4000		Silt	scalar	*Visual	NONE	NONE
2000 - Abnormal		Debris	scalar	*Visual	NONE	NONE
0	4	Sand/Dirt	scalar	*Visual	NONE	NONE
Jan 27/22	May6/24	Appearance	scalar	*Visual	NORML	NORML
Ja	2	Odor	scalar	*Visual	NORML	NORML
Particle Trend		Emulsified Water	scalar	*Visual	>0.05	NEG
40k		Free Water	scalar	*Visual		NEG
Ξ 30k - 6μm		FLUID PROPER	TIES	method	limit/base	current
85 25k		Visc @ 40°C	cSt	ASTM D445	45	6 52.1
5 15k -		SAMPLE IMAGE	S	method	limit/base	current
5k -						
ok 22/1/2 mel	- 19/6/24	Color				
Acid Number		Bottom				
		GRAPHS				
E U.40		Ferrous Alloys				Particle Count
@ 0.24-		10 iron 1			491,52	¹⁰ T
0.00		o chromium			122,88	10 -
Jan 27/22	<i>40 3</i> ~9	E 6 - nickel				
Jar	19 19	2			30,72	10 -
Water (KF)					7,68	10-
12000		0			May6/24	
10000 - Severe		Jan 27/22			Way(ber 1,92	
Ē ⁸⁰⁰⁰		Non-ferrous Meta	als		apite 48	10-
radia (0000 + 00000 + 00000 + 00000 + 0000 + 0000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 00000 + 000000		15 copper			May6/24 number of particles (per 1 ml)	
≥ 4000		10			12 mper	
2000		E tin				10 -
0 Abnormal		5 -				8
Jan 27/22	100	0 Lanna and a statement of the statement				⁸ Bibrevernal
Jai	μ.đ.	Jan 27/22			May6/24	2-
Particle Trend		Janž			Mar	0,
40k		🔺 Viscosity @ 40°C				^{4μ} 6μ 1 Acid Number
35k - 4μm Ξ 30k - 14μm		60 55 Severe			2.0 H(d) 2.0 H(d) 0.1 0 J Mmuhoeu 0.0 0 J Mmuhoeu 0.0	
					KOH	16
8 25k be 20k o 15k up 10k		50 50 50 50 50 50 50 50 50 50 50 50 50 5			E_0.7 ອ	2
5 15k -		Autonna			- quint - quin	8-
		40 Severe				1
						0.1
Jan 27/22	V G G T	Jan 27/22			May6/24	Jan 27/22
С. С.	A A					
	Unique Number	r : 06174642 er : 11020695 e : IND 2 (Additional Te rt, contact Customer Serv at are outside of the ISO	Recei Teste Diagr ests: KF, P vice at 1-8 17025 sco	ived : 09 id : 13 nosed : 13 PrtCount) 800-237-1369 ope of accrea	9 May 2024 9 May 2024 May 2024 - Do 9. Iitation.	josl

ID TECHNOLOGY

38,4

21µ

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: IDTFRE [WUSCAR] 06174642 (Generated: 05/13/2024 14:08:44) Rev: 1

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history2

history2

history2

no image

no image

-22

OSI 0 4406:1999 Clea

14 5

Lod

May6/24

history1

LIGHT

NONE

NONE

NONE

NONE

NONE

NORML

NORML

history1

history1

NEG

NEG

44.1

14