

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER 6859010

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		KCPA016354	KCP54700	KCP41318	
Sample Date		Client Info		20 Mar 2024	27 Feb 2023	29 Aug 2022	
Machine Age	hrs	Client Info		2814	1993	1517	
Oil Age	hrs	Client Info		821	1993	282	
Oil Changed		Client Info		Changed	Changed	Changed	
Sample Status				NORMAL	ATTENTION	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	<1	0	<1	
Chromium	ppm	ASTM D5185m		<1	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	0	
Titanium	ppm	ASTM D5185m		<1	0	0	
Silver	ppm	ASTM D5185m	>2	<1	0	0	
Aluminum	ppm	ASTM D5185m		2	<1	<1	
			>10	0	0	0	
Lead	ppm	ASTM D5185m					
Copper	ppm	ASTM D5185m		2	0	<1	
Tin	ppm	ASTM D5185m	>10	<1			
Vanadium	ppm	ASTM D5185m		<1	0	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0	0	
Barium	ppm	ASTM D5185m	90	30	63	32	
Molybdenum	ppm	ASTM D5185m	0	0	0	0	
Manganese	ppm	ASTM D5185m		0	<1	0	
Magnesium	ppm	ASTM D5185m	100	79	93	81	
Calcium	ppm	ASTM D5185m	0	5	1	1	
Phosphorus	ppm	ASTM D5185m	0	2	2	4	
Zinc	ppm	ASTM D5185m	0	4	0	3	
Sulfur	ppm	ASTM D5185m	23500	22277	23474	18073	
CONTAMINANTS		method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	10	2	<1	
Sodium	ppm	ASTM D5185m		22	22	14	
Potassium	ppm	ASTM D5185m	>20	5	<1	0	
Water	%	ASTM D6304	>0.05	0.012	0.011	0.022	
ppm Water	ppm	ASTM D6304	>500	121	118.9	223.1	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647		3088	7281	3789	
Particles >6µm		ASTM D7647	>1300	513	1580	786	
Particles >14µm		ASTM D7647	>80	21	99	59	
Particles >21µm		ASTM D7647	>20	4	20	12	
Particles >38µm		ASTM D7647	>4	0	2	0	
Particles >71µm		ASTM D7647	>3	0	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	19/16/12	20/18/14	19/17/13	
FLUID DEGRADA		method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.37	0.30	0.41	

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12000

10000

800 Water (ppm)

6000

4000

2000

14

2 0

12000

n

60

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40 Ser

35

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Apr25/22

Particle Trend

ua29/22

OIL ANALYSIS REPORT

).	Water (KF)	VISUAL		method	limit/bas
).	Severe	White Metal	scalar	*Visual	NONE
).		Yellow Metal	scalar	*Visual	NONE
).		Precipitate	scalar	*Visual	NONE
).		Silt	scalar	*Visual	NONE
).		Debris	scalar	*Visual	NONE
).	Abnormal	Sand/Dirt	scalar	*Visual	NONE
	0ct13/21 Apr25/22 Aug29/22 Feb27/23 Mar20/24	Appearance	scalar	*Visual	NORML
	Oct Augi Febi	Odor	scalar	*Visual	NORML
	Particle Trend	Emulsified Water	scalar	*Visual	>0.05
		Free Water	scalar	*Visual	
		FLUID PROPERT	IES	method	limit/bas
		Visc @ 40°C	cSt	ASTM D445	45
		SAMPLE IMAGES	3	method	limit/bas
-	0ct13/21 Apr25/22 Aug29/22 Feb27/23	Color			
)-).	Water (KF)	Bottom			
) -) -	Api25/22 - Api22/22 - Api22/23 -	GRAPHS Ferrous Alloys			491
	Viscosity @ 40°C	E 6 ministration nickel			30
J-	Saura				7
5.	Abnormal	0ct13/21	4ug29/22	-eb 27/23	0/24 1 ml
).		Apri	Aug	Feb	Mar2 es (per
5-	Base	Non-ferrous Metal	5		particl

0ct13/21

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60

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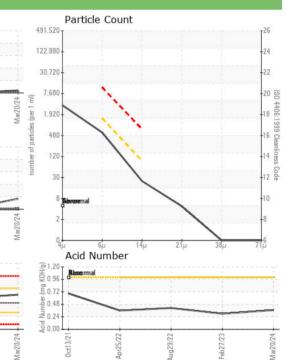
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45

40 Sever

35

Viscosity @ 40°C



NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

46.8

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

46.2

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

48.1



ua29/22

eb27/23

Feb27/23

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