

OIL ANALYSIS REPORT



Machine Id

8384572 (S/N 1483)

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

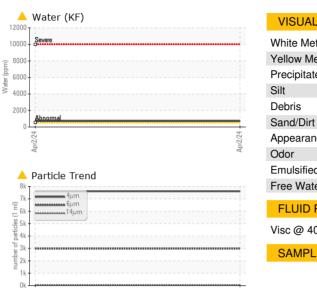
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

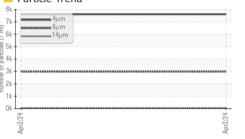
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA015069		
Sample Date		Client Info		02 Apr 2024		
Machine Age	hrs	Client Info		7		
Oil Age	hrs	Client Info		7		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	<1		
Silver	ppm	ASTM D5185m	>2	<1		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>50	1		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	90	33		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	100	24		
Calcium	ppm	ASTM D5185m	0	4		
Phosphorus	ppm	ASTM D5185m	0	2		
Zinc	ppm	ASTM D5185m	0	9		
Sulfur	ppm	ASTM D5185m	23500	20235		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	4		
Water	%	ASTM D6304	>0.05	A 0.070		
ppm Water	ppm	ASTM D6304	>500	A 708		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7608		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	66		
Particles >21µm		ASTM D7647	>20	3		
Particles >38µm		ASTM D7647	>4	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	A 20/19/13		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.23		



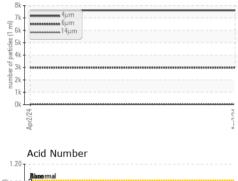
Built for a lifetime."

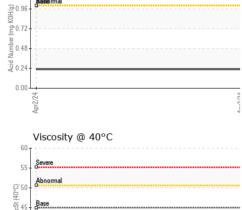
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	LIGHT		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	42.9		
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color					no image	no image
					noimage	no image
Bottom				a 5	no image	no image
GRAPHS						
Ferrous Alloys						
				Darticlo Count	-	
			491,520-	Particle Count		T2
iron			491,520·	Particle Count		
im			491,520	Particle Count		
iron chromium			491,520·	Particle Count		+2
iron http://www.chromium nickel			491,520 122,880 30,720	Particle Count		+2 +2
iron chromium nickel			491,520 122,880 30,720 7,680	Particle Count		+2 +2
iron chromium nickel			491,520 122,880 30,720 7,680	Particle Count		-2 +2 +2
iron chromium nickel			491,520 122,880 30,720 7,680	Particle Count		-7 -7 -7 -1
iron chromium Non-ferrous Metal			491,520 122,880 30,720 7,680	Particle Count		-7 -7 -7 -1
Non-ferrous Metal			491,520 122,880 30,720 7,680	Particle Count		+2 +2 +2 +1 +1
Non-ferrous Metal			491,520- 122,880- 30,720- 7,680- 7,680- 7,680- 7,680- 122,200 122,200 122,200 122,200 122,200 122,200 122,200 122,880- 122,99- 120,99- 12	Particle Count		+2 +2 +1 +1 +1 +1
Non-ferrous Metal			491,520 122,880 30,720 7,680	Particle Count		12 +2 +2 +2 +2 +1 +1 +1 +1
Non-ferrous Metal	s		491,520- 122,880- 30,720- 7,680- 7,20- 7,680- 7,20- 7,	Particle Count		+2 +2 +1 +1 +1 +1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 7,680 7,680 7,680 7,680 1,920 480 1,920 480 1,920 480 30,720 1,920 1,920 480 30,720 8,9 480 480 480 480 480 480 480 480			+2 +2 +2 +1 1 +1 +1 +1 +1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 7,680 7,680 7,680 7,680 1,920 480 1,920 480 1,920 480 30,720 1,920 1,920 480 30,720 8,9 480 480 480 480 480 480 480 480			+2 +2 +1 +1 +1 +1 +1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 7,680 7,680 7,680 7,680 1,920 480 1,920 480 1,920 480 1,920 480 30,720 80 122,880 122,880 80 122,880 122,880 80 122,880 102,000 100,000 102,000		14μ 21μ	-2 -2 -2 +1 -1 +1 +1 -1 +1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 427,680 427,680 427,680 427,680 427,680 420,790 480 480 480 480 480 480 480 48	Bereemal		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 420,790 420,790 400,7	Bereemal		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 420,790 420,790 400,7	Berevernal Acid Number		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 420,790 420,790 400,7	Berevernal Acid Number		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 420,790 420,790 400,7	Berevernal Acid Number		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 7,680 7,680 7,680 7,680 1,920 480 1,920 1,200 1,	Berevernal Acid Number		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
Non-ferrous Metal	s		491,520: 122,880 30,720 7,680 420,790 420,790 400,7	Berevernal Acid Number		-2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1



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> Sample No. : KCPA015069 :08 Apr 2024 21 FATHER DEVALLES BLVD Received Lab Number : 06142305 Tested : 09 Apr 2024 FALL RIVER, MA Unique Number : 10967113 Diagnosed : 10 Apr 2024 - Doug Bogart US 02723 Test Package : IND 2 (Additional Tests: KF, PrtCount) Contact: ALEX SHEA Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. alex.shea@l3harris.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: L3TFAL [WUSCAR] 06142305 (Generated: 04/10/2024 09:31:24) Rev: 1

Laboratory

Contact/Location: ALEX SHEA - L3TFAL Page 2 of 2

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