

# **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

Machine Id

# 8876317 (S/N 1992) Compressor

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

#### 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 particulates present in the oil.

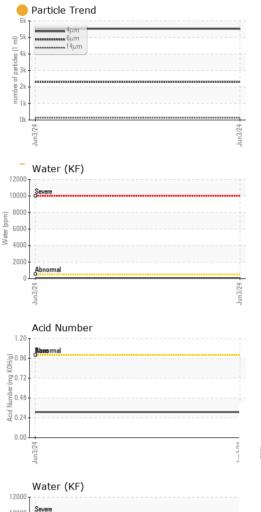
#### Fluid Condition

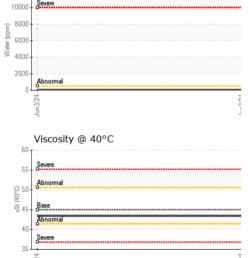
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA017752		
Sample Date		Client Info		03 Jun 2024		
Machine Age	hrs	Client Info		10989		
Oil Age	hrs	Client Info		10989		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm		>10	2		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m		8		
Tin	ppm	ASTM D5185m	>10	۲ ۲		
Vanadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	nnm	ASTM D5185m	0	0		
	ppm			0		
Barium	ppm	ASTM D5185m	90			
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m	100	0		
Magnesium	ppm	ASTM D5185m	100	1		
Calcium	ppm	ASTM D5185m	0	0		
Phosphorus	ppm	ASTM D5185m	0	0		
Zinc	ppm	ASTM D5185m	0	0		
Sulfur	ppm	ASTM D5185m	23500	9526		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	<1		
Water	%	ASTM D6304	>0.05	0.006		
ppm Water	ppm	ASTM D6304	>500	67		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		5522		
Particles >6µm		ASTM D7647	>1300	<mark> </mark> 2304		
Particles >14µm		ASTM D7647	>80	<b>e</b> 128		
Particles >21µm		ASTM D7647	>20	<mark> </mark> 25		
Particles >38µm		ASTM D7647	>4	2		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>20/18/14</b>		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.31		



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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	IFS	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	43.4		
SAMPLE IMAGES	2	method	limit/base	current	history1	history2
	,	method		current	matory	Thistory2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
GRAPHS Ferrous Alloys				Particle Count		
Ferrous Alloys			491,521		-	T <sup>2</sup>
Ferrous Alloys			491,521	T	-	
Ferrous Alloys			122,880	0 -	:	-2
Ferrous Alloys				0 -	:	-2
Ferrous Alloys			122,880 30,720 7,680	0 - 0 -		-2 -2
Ferrous Alloys			122,880 30,720 7,680			-2 -2 -2
Ferrous Alloys			122,880 30,720 7,680			-2 -2 -2
Ferrous Alloys	5		122,880 30,720 7,680			-2 -2 -2 -11
Ferrous Alloys	5		122,880 30,720 7,680			-2 -2 -11 -11
Ferrous Alloys	5		122,880 30,724 7,680 42,5400 42,5400000000000000000000000000000000000			-2 -2 -10 -11 -11
Ferrous Alloys	5		122,880 30,720 7,680			-2 -2 -10 -11 -11
Ferrous Alloys	5		122.680 30,724 7.681 HZCFUN HZ			-2 -2 -1 -1 -1 -1 -1 -1 -1
Ferrous Alloys	5		122.880 30.724 7.680 7.680 7.680 7.680 7.680 7.680 1.924 80 90 90 90 90 90 90 90 90 90 90 90 90 90	D D D D D D D D D D D D D D D D D D D		-2 -2 -11 -11 -11 -11 -11 -11
Ferrous Alloys	5		122.880 30.724 7.680 7.680 7.680 7.680 7.680 7.680 1.924 80 90 90 90 90 90 90 90 90 90 90 90 90 90	D D D D D D D D D D D D D D D D D D D		-2 -2 -11 -11 -11 -11 -11
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Ferrous Alloys	5		122.880 30,724 7,681 42000 480 50 aquinu 122 480 480 480 480 480 480 480 480 480 480	β β β β β β β β β β β β β β		-2 -2 -11 -11 -11 -11 -11 -11 -11 -11 -1
Ferrous Alloys	5		122.880 30,724 7,681 42000 480 50 aquinu 122 480 480 480 480 480 480 480 480 480 480	β β β β β β β β β β β β β β		-2 -2 -11 -11 -11 -11 -11 -11 -11 -11 -1
Ferrous Alloys	5		122.880 30,724 7,681 42000 480 50 aquinu 122 480 480 480 480 480 480 480 480 480 480	β β β β β β β β β β β β β β		
Ferrous Alloys	5		122.880 30,724 7,681 42000 480 50 aquinu 122 480 480 480 480 480 480 480 480 480 480	β β β β β β β β β β β β β β		-2 -2 -11 -11 -11 -11 -11 -11 -11 -11 -1
Ferrous Alloys	5		122.880 30,724 7.681 Hu 1,924 HJCCun Hu 1,924 HJCCun Numperod HJCCun HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN HJCCUN	Acid Number		-2 -2 -11 -11 -11 -11 -11 -11 -11 -11 -1
Ferrous Alloys	5		122.880 30,724 7,681 42000 480 50 aquinu 122 480 480 480 480 480 480 480 480 480 480	Acid Number		-2 -2 -11 -11 -11 -11 -11 -11 -11 -11 -1

: 12 Jun 2024



Lab Number : 06207792 Tested : 13 Jun 2024 WESTMINSTER, MD : 14 Jun 2024 - Don Baldridge Unique Number : 11075253 Diagnosed Test Package : IND 2 (Additional Tests: KF, PrtCount) Contact: Service Manager Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - 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)

Received

Report Id: LAIWES [WUSCAR] 06207792 (Generated: 06/14/2024 11:34:28) Rev: 1

Laboratory

Sample No.

: KCPA017752

Contact/Location: Service Manager - LAIWES Page 2 of 2

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