

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend

ISO

# KAESER 8736128

Compressor Fluid

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

#### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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.

			Apr2023	Dec2023		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC127590	KC112455	
Sample Date		Client Info		29 Dec 2023	18 Apr 2023	
Machine Age	hrs	Client Info		5443	2424	
Oil Age	hrs	Client Info		0	2424	
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	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	18	12	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	90	11	24	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	100	31	50	
Calcium	ppm	ASTM D5185m	0	1	2	
Phosphorus	ppm	ASTM D5185m	0	86	3	
Zinc	ppm	ASTM D5185m	0	53	8	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	1	
Sodium	ppm	ASTM D5185m		6	17	
Potassium	ppm	ASTM D5185m	>20	0	9	
Water	%	ASTM D6304	>0.05	0.033	0.014	
ppm Water	ppm	ASTM D6304	>500	337	149.6	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		26350		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	<u> </u>		
Particles >21µm		ASTM D7647	>20	<u> </u>		
Particles >38µm		ASTM D7647	>4	<u> </u>		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>A</b> 22/20/17		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.37	0.32	



number of 1

12000

10000

8000 (maa)

6000 Water 4000

Pio 0.24 0.00

12000

10000 Seve

800 muu 6000 Water ( 4000 2000

Bas (B/H0.96 KOH/8) E 0.72 

..... 25 u [] 201 15k

Built for a lifetime."

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Particle Trend		VISUAL		method	limit/bas	e current
5k - 4μm 5k - 5μm		White Metal	scalar	*Visual	NONE	NONE
0k -		Yellow Metal	scalar	*Visual	NONE	NONE
5k		Precipitate	scalar	*Visual	NONE	NONE
0k -		Silt	scalar	*Visual	NONE	NONE
5k -		Debris	scalar	*Visual	NONE	NONE
Dk		Sand/Dirt	scalar	*Visual	NONE	NONE
Apr1 8/23	Dec29/23	Appearance	scalar	*Visual	NORML	NORML
Ap	Dec	Odor	scalar	*Visual	NORML	NORML
Water (KF)		Emulsified Water	scalar	*Visual	>0.05	NEG
00 Severe		Free Water	scalar	*Visual		NEG
	-	FLUID PROPER	TIES	method	limit/bas	e current
10		Visc @ 40°C	cSt	ASTM D445	45	45.8
0-		SAMPLE IMAGE	S	method	limit/bas	e current
D - Abnormal						
Apr18/23	Dec29/23 -	Color				
Apr	Deci					
Acid Number						11-JA
Basermal		Bottom				
5 <b>-</b>						
2		GRAPHS				
8		Ferrous Alloys				🔺 Particle Co
4 -		10 iron			491	,520
) 		chromium			122	.880 -
Apr1 8/23		4				,720
Ř		2				,120
Water (KF)		0		<del></del>		,680-
Severe		Apr1 8/23			Dec29/23 \$ (per 1 ml	,920 -
			la.		De icles (p	400
		Non-ferrous Meta	IS		of parti	480 -
		copper			Dec29/23	120-
	5	10-			Ĩ	30-
Abnormal		5-				
Apr18/23						<sup>8</sup> <b>Bereve</b> mal
Apr		8/23		****	9/23	2-
Viscosity @ 40°C		Apr18/23			Dec29/23	0
Severa		Viscosity @ 40°C				<sup>4μ</sup> 6μ Acid Numb
Severe		55 Severe			(B/H	1.20 0.96 0.72 0.48 0.24
Abnormal	0				ng KO	0.72
Base	\$5 (40	50 - Base 45 - Abnormal			her (n	0.48
Abnormal	0	40 -			Nur h	0.24
Severe		35 Severe				0.00
;		//23			//23	12



history1

NONE

NONE NONE

NONE

MODER

NONE

NORML

NORML

history1

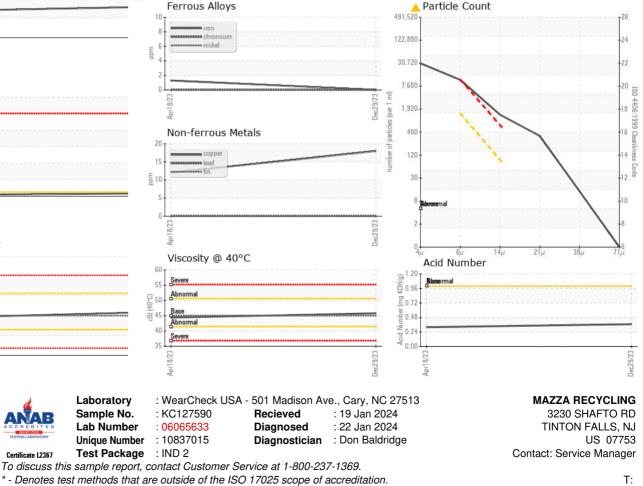
NEG

NEG

44.4

history2

history2



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

Contact/Location: Service Manager - MAZTINKC