

### **OIL ANALYSIS REPORT**



Machine Id

# 9038650 (S/N 1448)

Compressor Fluid KAESER SIGMA (OEM) S-460 (--- QTS)

#### 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 light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

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

SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KC128811	KC05949113	
Sample Date		Client Info		29 May 2024	28 Aug 2023	
Machine Age	hrs	Client Info		9429	3124	
Oil Age	hrs	Client Info		3000	0	
Oil Changed		Client Info		Changed	N/A	
Sample Status				ABNORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	<1	<1	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m		12	2	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m	-	<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m	90	0	0	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus	ppm	ASTM D5185m		9	51	
Zinc	ppm	ASTM D5185m		1	10	
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	<1	
Sodium	ppm	ASTM D5185m		2	<1	
Potassium	ppm	ASTM D5185m	>20	1	0	
Water	%	ASTM D6304	>0.05	<b>A</b> 0.116	0.001	
ppm Water	ppm	ASTM D6304	>500	<b>A</b> 1160	6.6	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		766	621	
Particles >6µm		ASTM D7647	>1300	417	163	
Particles >14µm		ASTM D7647	>80	71	13	
Particles >21µm		ASTM D7647	>20	24	3	
Particles >38µm		ASTM D7647	>4	4	0	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	17/16/13	16/15/11	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.28	0.087	

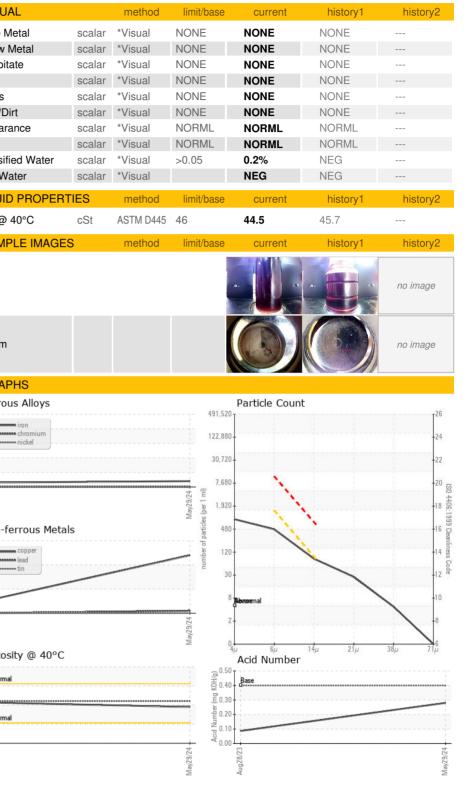


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	Water (KF)			
12000				VISUAL
10000.	Severe			White Metal
8000				Yellow Metal
d 6000-	1			Precipitate
4000.				Silt
2000 -				Debris
0	Abnormal			Sand/Dirt
	Aug28/23		May29/24	Appearance
	Aug		Mayź	Odor
	Particle Trend			Emulsified Water
1k-				Free Water
≘ <sup>1k</sup> ·	4μm 6μm			
1k •	14μm			FLUID PROPER
number of particles (1 ml) N N N N N N N			A STATE OF THE OWNER WATCHING.	Visc @ 40°C
jo ok •		MARA PATRICIC DI CALCOLULI DI CAL	1. TANGA BARAN	SAMPLE IMAGE
qunn Ok •	NTO TRADUCTION OF A DAMAGE AND A			
Ok • Ok •	Name in the second in the seco			
UK-	8/23		9/24 -	Color
	Aug28/23		May29/24	
0.50	Acid Number			
	Base			Bottom
B/H03		***********		
B0.30				GRAPHS
Acid Number (mg KOH/g) 0.30 0.20 0.10				
N 0 10-				Ferrous Alloys
				8- iron
0.00-	/23		Č.	E 6 - nickel
	Aug28/23		1000-11	
			-	2 -
52	Viscosity @ 40°C			
50.	Abnormal			Aug28/23
48.				
(10°C) 40°C) 44	Base			Non-ferrous Meta
tz 44.				copper
42.	Abnormal			10 +
40.				
38-	3/23		10.	
	Aug28/23		1000-14	0
				Aug28/23
1k-	Particle Trend			⊲ Viscosity @ 40°C
1k ·	4μm 6μm			55 T
number of particles (1 ml) N N N N N N N	14μm			50 - Abnormal
anticles 0k			Training the second second	
jo Ok -		A OTHER DESIGNMENT OF A DESIGNATION OF A D	In the second	(C) Base (C) 45 (C) 45 (C) 45 (C) 45 (C) 45
quin Ok •	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW			40 -
Ok •		10199000010000001000000000000000000000	01100001010000010000000000000000000000	35
0k -	8/23		10	Aug28/23
	Aug28/23		1000-W	Au
	-		<u>~</u>	
<b>11</b> 2	23279×10	d	Laboratory	: WearCheck USA - 50
		AÑAB	Sample No.	: KC128811
<b>3</b> 7		A C C R E D I T E D ISONCORONI TESTING LABORATORY	Lab Number	: 06200752
			Unique Number Test Package	: 11062875 : IND 2
<u>Э</u> ,	arester   .	Certificate L2367	Test Fackage	





01 Madison Ave., Cary, NC 27513 **KP COMPONENTS** Received : 05 Jun 2024 1407 PELZOR HWY Tested : 13 Jun 2024 EASLEY, SC Diagnosed : 13 Jun 2024 - Jonathan Hester US 29640 Contact: Service Manager 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)

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Contact/Location: Service Manager - KPCEAS

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Page 2 of 2