

### **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

Machine Id

# 4675951 (S/N 1441)

Component Compressor Fluid KAESER SIGMA (OEM) S-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.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC06151150	KC05637690	
Sample Date		Client Info		19 Mar 2024	18 Aug 2022	
Machine Age	hrs	Client Info		8128	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
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		0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m		<1	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m		3	2	
Tin	ppm	ASTM D5185m	>10	۔ <1	<1	
Vanadium	ppm	ASTM D5185m	~10	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	nom	ASTM D5185m	in the base	0	0	
Barium	ppm	ASTM D5185m	90	0	<1	
Molybdenum	ppm	ASTM D5185m	90	0	0	
	ppm	ASTM D5185m		1	<1	
Manganese Magnesium	ppm	ASTM D5185m	90	31	10	
Calcium	ppm	ASTM D5185m		<1	0	
Phosphorus	ppm	ASTM D5185m	2	4	18	
Zinc	ppm	ASTM D5185m		4	50	
	ppm			-		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	
Sodium	ppm	ASTM D5185m		9	2	
Potassium	ppm	ASTM D5185m	>20	2	0	
Water	%	ASTM D6304		0.015	▲ 0.096	
ppm Water	ppm	ASTM D6304	>500	155	<mark>▲</mark> 960	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		6730		
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	3		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>A</b> 20/19/15		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.30	0.22	

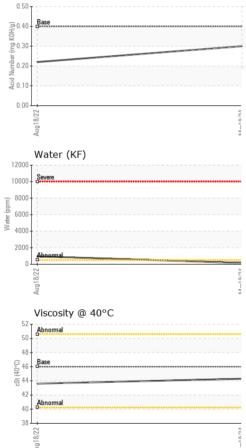


Water (ppm)

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Built for a lifetime.

#### 🔺 Particle Trend 7k 6 Ē 51 14µm of particles ( 3k e 2k 0 Aug18/22 -Mar19/24 -Water (KF) 12000 Sev 10000 800 6000 400 200 /larl Aug1 Acid Number



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	A MODER	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
9/24 -	Appearance	scalar	*Visual	NORML	NORML	NORML	
Mar19/24	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	46	44.3	43.6	
	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
			mothod				
Mar19/24	Color						no image
-	Bottom						no image
	GRAPHS						
	Ferrous Alloys				Particle Count	t	
	10 iron			491,520	I		T <sup>2</sup>
5	6 - 6 - 6			122,880			-2
10/10/10/10/10				30,720			
N N	2			30,720	1		-2
				7,680	~ `		-2
	Aug18/22			Mar19/24 (per 1 ml	1		
	Aug			1,920 Marija S			Ţ
	Non-ferrous Met	als		10 11 10 480		`	
	10 copper			d to to			-1 -1 -1
	0 + economic lead			42/0 Lar 1,920			
	E 6			= 30	-		-1
	2					)	
A CLO F.				0	<b>Bereve</b> mal		
	6/22			42/6	•		
	Aug 18/22			Mar19/2 <sup>4</sup>			
	⊲ Viscosity @ 40°C			- 0 <sub>4</sub>	μ 6μ A cid Number	14µ 21µ	38µ 71µ
	<sup>55</sup> T			- 0.50	Acid Number		
	50 Abnormal			₩ 0.40	Base	*****	*****
	() () () () () () () () () () () () () (			(0,50 0,40 0,30 4 mm, 0,20 0,10 0,10 0,10			
*****	5 45			je 0.20			
	Abnormal			P 0.10			
	40 - Abnormal			5			
	40			0.00			
24	40			0.00	18/22		
	40 - 9			0000 A	Aug18/22		

\* - 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) F:

Contact/Location: Service Manager - STAMTA