

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# KAESER 7361648

#### Component Compressor Fluid KAESER SIGMA (OEM) S-460 (--- GAL)

### DIAGNOSIS

#### 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 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	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KC130354	KC73235	
Sample Date		Client Info		24 May 2024	31 Mar 2023	
Machine Age	hrs	Client Info		3286	1609	
Oil Age	hrs	Client Info		1677	538	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	
Chromium	ppm	ASTM D5185m		<1	0	
Nickel	ppm	ASTM D5185m	>3	<1	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>2	<1	0	
Aluminum		ASTM D5185m		3	0	
	ppm					
Lead	ppm	ASTM D5185m	>10	<1 4	0	
Copper	ppm	ASTM D5185m			<1	
Tin	ppm	ASTM D5185m	>10	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m	90	1	0	
Molybdenum	ppm	ASTM D5185m		<1	<1	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	90	38	50	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus	ppm	ASTM D5185m		3	7	
Zinc	ppm	ASTM D5185m		9	0	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	
Sodium	ppm	ASTM D5185m		16	10	
Potassium	ppm	ASTM D5185m	>20	8	10	
Water	%	ASTM D6304		0.019	0.020	
ppm Water	ppm	ASTM D6304	>500	192	206.3	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		8617	31248	
Particles >6µm		ASTM D7647	>1300	<b>A</b> 3571	▲ 14625	
Particles >14µm		ASTM D7647	>80	<b>193</b>	▲ 368	
Particles >21µm		ASTM D7647		<u> </u>	▲ 37	
Particles >38µm		ASTM D7647	>4	2	1	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	▲ 20/19/15	A 22/21/16	
FLUID DEGRADA		method	limit/base		history1	history
				current		history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.25	0.26	



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	Particle Trend			VISUAL	
35k _ 30k	4μm			White Metal	
25k - 20k - 5 15k - 10k -	6μm			Yellow Metal	SCa
3 20k				Precipitate	SC:
15k -	Add Statement of Long State Street on Long St			Silt	
10k -	and the state of t			Debris	SCa
5k-			a ka ka ang kang kang kang kang kang kan	Sand/Dirt	SCa
0k I	23		24	Appearance	SCa
	Mar31/23		May24/24	Odor	SCa
	2		2	Emulsified Water	SCa
2000	Water (KF)			Free Water	SCa
2000	Severe			Free water	SCa
				FLUID PROPER	TIES
8000-				Visc @ 40°C	cS
6000-				-	
4000-				SAMPLE IMAGE	S
2000-	Abnormal				
01	/23		/24	Color	
	Mar3 1/23		May24/24	00101	
			2		
0.50 т	Acid Number				
	Rano			Bottom	
0.40 -	Base		*****		
0.30					
0.20				GRAPHS	
0 10				Ferrous Alloys	
				8 iron	
.001	23		VC	c honore nickel	
	Mar3 1/23		1010-14		
	2		2	2	
000 <del>т</del>	Water (KF)				
00	Severe			Mar31/23	
				—	
100				Non-ferrous Meta	IS
000				s- copper	
000-				E 6+ tin	
000-	Abnormal				
01	/23		YC.	2-	
	Mar31,		C.FCW	0	
			4	Mar31/2	
52 <del>-</del>	Viscosity @ 40°	°C			
50	Abnormal			Viscosity @ 40°C	
48				50 - Abnormal	
46 2 3 44	Base				
44				G 0 + 45 + Base X3 Abnormal	
42	Abnormal			40 - Abnormal	
40	0			35	
38	/23		VC	1/23	
	Mar31/23		VC VC - W	Mar31.	
	<		44 1		
ուս		d	Laboratory	: WearCheck USA - 50	)1 Ma
1		ANAB	Sample No.	: KC130354	R
	&Table 34	ACCREDITED	Lab Number	: 06217278	T
¥.	7 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 1				
ĺ,		Codificante 19967	Unique Number Test Package	: 11090142 · IND 2	D
		Certificate L2367 To discuss this	Test Package	: 11090142 : IND 2 contact Customer Serv	_

\* - Denotes test me

Statements of conf ιy э

Report Id: HARPINKC [WUSCAR] 06217278 (Generated: 06/25/2024 17:22:50) Rev: 1

Contact/Location: Service Manager - HARPINKC

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	NONE	
Debris	scalar	'Visual	NONE	NONE	LIGHT	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt /	ASTM D445	46	43.3	43.1	
SAMPLE IMAGES	;	method	limit/base	current	history1	history
Color						no image
Bottom						no image
Dottom						no inago
GRAPHS						
Ferrous Alloys				Particle Count		
10 iron			491,520	Ι		I
o - chromium			122,880			
E 6 ministration nickel						
2			30,720	†		12
			7,680	~ `		+7
Mar31/23			4/24 .	1.		
Mar3			Man242 March 1782 March 1782 Marc		•	1
Non-ferrous Metals	5		101 480			
10 copper 1			ja 120	``````````````````````````````````````		
8 sesses lead			quint			- - - - - - - - - - - - 
			30	-	$\backslash$	-1
2			8	Bioreman		-
0						
31/23			May24/24	t		
Mar31,			0 May2			
Viscosity @ 40°C			-4	وہ Acid Number	14μ 21μ	38µ 71µ
55			⊕ <sup>0.50</sup>			
50 Abnormal			(b)HO() 0.40 (b)HO() 0.40 (b) 0.30 (c) 0.20 (c)	Base		
E 45 - Abnormal			Ē 0.30			
Abnormal			g 0.20	-		
			Z 0.10			
35						
Mar31/23			May24/24	Mar31/23		
M			M	2		
: WearCheck USA - 501 : KC130354	Madison <b>Receiv</b>		, NC 27513 Jun 2024	н	ARBOR DISTR	IBUTORS I 1 62ND AVE
: 06217278	Tested		5 Jun 2024			LAS PARK,
11090142	Diagno		Jun 2024 - Don	Baldridge		US 337
11090142						
IND 2 ontact Customer Servic					Contact: Se	ervice Manag