

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

KAESER 8842915

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

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

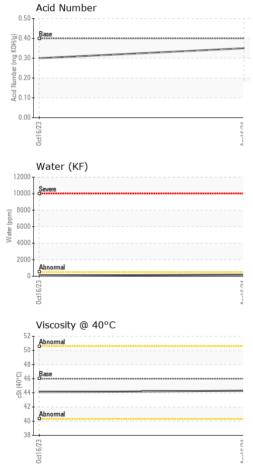
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC122181	KC111639	
Sample Date		Client Info		16 Apr 2024	16 Oct 2023	
Machine Age	hrs	Client Info		4151	2068	
Oil Age	hrs	Client Info		0	2068	
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	0	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
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	<1	
Copper	ppm	ASTM D5185m	>50	7	10	
Tin	ppm	ASTM D5185m	>10	<1	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	
Barium	ppm	ASTM D5185m	90	34	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		1	<1	
Magnesium	ppm	ASTM D5185m	90	44	<1	
Calcium	ppm	ASTM D5185m		0	0	
Phosphorus	ppm	ASTM D5185m	-	0	2	
Zinc	ppm	ASTM D5185m		0	0	
CONTAMINANTS	1-1-	method	limit/base	current	history1	history2
Silicon	ppm		>25	3	<1	
Sodium	ppm	ASTM D5185m	0	11	2	
Potassium	ppm	ASTM D5185m	>20	1	- <1	
Water	%	ASTM D6304	>0.05	0.02	0.009	
ppm Water	ppm	ASTM D6304		200	92.8	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		19641	60342	
Particles >6µm		ASTM D7647	>1300	<u>▲</u> 3885	▲ 26306	
Particles >14µm		ASTM D7647	>80	▲ 148	▲ 2992	
Particles >21µm		ASTM D7647		<u> </u>	▲ 773	
Particles >38µm		ASTM D7647	>4	1	▲ 34	
Particles >71µm		ASTM D7647	>3	0	▲ 2	
Oil Cleanliness		ISO 4406 (c)	>/17/13	▲ 21/19/14	▲ 23/22/19	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
		ASTM D8045			0.30	
Acid Number (AN)	mg KOH/g	AO I IVI DOU45	0.4	0.35	0.30	



OIL ANALYSIS REPORT

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A Particle Trend	
4µm	
Ξ 50k - 50k - 50	
38 92 40k	
te. 	
DUK παταπατώς βμm 250k παταπατώς βμm 30k παταπατώς βμm 40k παταπατώς βμm 20k παταπατώς βμm 100 παταπατώς βμm	
² 10k -	THE R. L. P. LEWIS CO. LANSING MICH. N. P. LEWIS CO. L.
0k +	4.
0ct16/23	Apr16/24
0	Ap
Water (KF)	
12000	
12000 10000 - Severe	
10000 - Severe	
10000 - Severe	
10000 - Severe	
10000 - Severe 8000 - <u><u><u></u></u> <u><u></u></u> <u><u></u></u> <u><u></u></u> <u><u></u></u> <u><u></u></u> <u><u></u></u> <u></u> <u></u></u>	
10000 - Severe	
10000 - Severe 6 6000	April6/24



	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	NONE	
The advantation of the state in the	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
3/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Apr16/24	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
	Free Water	scalar	*Visual	20.00	NEG	NEG	
				11 11 11			
	FLUID PROPEF Visc @ 40°C	cSt	method ASTM D445	limit/base	current 44.3	history1 44.1	history2
	SAMPLE IMAG						history
	SAMPLE IMAGI	<u>=</u> 5	method	limit/base	current	history1	history2
/24	Color					0.	no image
Apr16/24							0
*****	Bottom						no image
	GRAPHS						
	Ferrous Alloys				Particle Count		
	¹⁰			491,520			T ²
	8 - iron chromium			122,880			
10.0	E 6			122,000			-2
A1	Ē 4			30,720			-2
	2-			7 680			
				7,680 12			14
	0ct16/23			Apr16/24. (per 1 ml)			-1
		alc		V uticles (480	11	N	
	Non-ferrous Met	.a15		Apr16/24 Apr16/24 1500 1501 1001			+2 +1 +1 +1 +1 +1
	copper				-	11	-1
	BEREARD BEREARD CONC						
	E 6-						
				30	-		-1
Υ	C				Bioreemal		-1 -1
AA.0.74				30 			
Aundora				30 			
A10 CA	64 24 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			30	Bioresemal	14μ 21μ	
Act of a		2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
And COA	Viscosity @ 40°C	2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
And DOA	Viscosity @ 40°C	2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
Anderse	64 44 2 0 Viscosity @ 40°C 55 50 45 64 64 64 64 64 64 64 64 64 64	2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
A16.7.M	Viscosity @ 40°C	2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
A-4CDA	Viscosity @ 40°C	2		30 8 8 7 7 9 10 9 10 9 10 9 10 9 10 9 10 9 10	Boreaemal Acid Number	14μ 21μ	
AA	Viscosity @ 40°C	2		30 8 8 7 7 9 10 9 10 9 10 9 10 9 10 9 10 9 10	Boreaemal Acid Number	14μ 21μ	
Autopa	Viscosity @ 40°C	2		30 +2/9 Lind 42/9 Lind	Boreemal ¹ ⁴ ⁴ ⁶ ⁶ ⁴ ⁶	14μ 21μ	
Laboratory	Viscosity @ 40°C	501 Madiso		30 8 7 7 9 10 10 10 10 10 10 10 10 10 10 10 10 10	Boreemal Acid Number	A - PHILLIPSBURG	-EASTON HON
Sample No.	Viscosity @ 40°C	501 Madiso Recei	ved : 13	30 8 4 4 5 5 5 5 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1	Boreemal Acid Number	A - PHILLIPSBURG 400 CC	-EASTON HON DUNTY RD 5
Sample No. Lab Number	Uiscosity @ 40°C	501 Madiso Recei Teste	ved : 13 d : 14	30 8 10 10 10 10 10 10 10 10 10 10	Bioresemal Acid Number Base E20191100 PE HONE	A - PHILLIPSBURG 400 CC	-EASTON HON DUNTY RD 5 IPSBURG,
Sample No.	Uiscosity @ 40°C	501 Madiso Recei	ved : 13 d : 14	30 8 4 4 5 5 5 5 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1	Bioresemal Acid Number Base E20191100 PE HONE	A - PHILLIPSBURG 400 CC	EASTON HON UNTY RD S IPSBURG, US 088

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

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

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