

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

9122138 (S/N 1476)

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

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

An increase in the iron level is noted. 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		KC130114	KC120737	
Sample Date		Client Info		23 May 2024	03 Oct 2023	
Machine Age	hrs	Client Info		7857	2425	
Oil Age	hrs	Client Info		1484	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	35	2	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	2	1 4	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m		12	<1	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		د <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	<1	0	
Calcium	ppm	ASTM D5185m	2	<1	0	
Phosphorus	ppm	ASTM D5185m		12	49	
Zinc	ppm	ASTM D5185m		3	0	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	17	11	
Sodium	ppm	ASTM D5185m		<1	1	
Potassium	ppm	ASTM D5185m	>20	3	6	
Water	%	ASTM D6304	>0.05	0.011	0.009	
ppm Water	ppm	ASTM D6304	>500	114	93.6	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<u> </u>		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	527		
Particles >21µm		ASTM D7647	>20	<mark>/</mark> 31		
Particles >38µm		ASTM D7647	>4	2		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	A 25/24/16		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.33	0.23	



A Particle Trend

0.50 (B/HOX Base

Ē0.30 - a u u 0.20 .10 AC 0.00 0ct3/23

12000 10000 Seven

> 52 Ab 50

(10°C) (10°C) (10°C) B 44 42 Abnormal

40

350k 300 E 250

<u>응</u> 200 if pa 150k her 100k 50k 0k

12000

Built for a lifetime."

OIL ANALYSIS REPORT

irticle Trend		VISUAL		method	limit/base	current	history1	history2
4μm 4μm	W	hite Metal	scalar	*Visual	NONE	NONE	NONE	
**********14μm	Y	ellow Metal	scalar	*Visual	NONE	NONE	NONE	
	P	recipitate	scalar	*Visual	NONE	NONE	NONE	
	Si	lt	scalar	*Visual	NONE	NONE	NONE	
	D	ebris	scalar	*Visual	NONE	NONE	A MODER	
		and/Dirt	scalar	*Visual	NONE	NONE	NONE	
	A May 23/24	opearance	scalar	*Visual	NORML	NORML	NORML	
	0 May	dor	scalar	*Visual	NORML	NORML	NORML	
ater (KF)	E	mulsified Water	scalar	*Visual	>0.05	NEG	NEG	
	Fi	ee Water	scalar	*Visual		NEG	NEG	
ere		FLUID PROPERT	IES	method	limit/base	current	history1	history2
	V	sc @ 40°C	cSt	ASTM D445	46	45.2	47.1	
		SAMPLE IMAGE	5	method	limit/base	current	history1	history2
ormal								
	^{3/24}	olor				a .	a	no image
	May23/24					hillow		0
id Number								
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se								
		GRAPHS						
		Ferrous Alloys				Particle Count		
	40 T	iron			491,520			T ²⁶
		chromium			122,880			-24
	u dd 20-	nickel	-	Restaura -				
	10-				30,720			-22
ater (KF)	0				7,680	· · · · ·		-20
Nora		0ct3/23			May23/24 particles (per 1 ml) 086			-20 -18 -16 -14
vere					May.	×. *		10
		Non-ferrous Metal	s		Portuged 480		1	16
	15	copper			a 120			+14
	_ 10-	tin			mu		. /	-12
normal	mdd -				30	-		-12
	5-				8	Béresemal		-10
		12			4			
	ΨW	0ct3/23			May23/24			
scosity @ 40°C					0 M	μ 6ju	14µ 21µ	38µ 71µ
normal	5.0	Viscosity @ 40°C			0.50	Acid Number	nun der Berth	autora (otorio)
	50-	Abnormal			(BHO) 10,50	Base		
					Ë 0 30			
	<del>ن</del> 48 -	Back			b			
	€ 46 -	Base			- 은 0.20			
8	(), 48 (), 0+ 46 t 3 44 42	Abnormal			-@ 0.20 			
66	(中) 46 - ぞう 44 - 42 - 40 -	Base Abnormal			0.20 M po.10 V po 0.00			
se	(中) 46 - ぞう 44 - 42 - 40 -	Ļ			23/24 0.00 Vacid Mumb	ct3/23		1000
66	(中) 46 - ぞう 44 - 42 - 40 -	Base Abnormal			00.0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	0et3/23		VCCW
is	0+) 46 42 40 40	0ct3/23	1 Madiaa	n Avo	May23/24	0ct3/23	DADIZ	
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normal Laborato	0+) 46 42 40 40	arCheck USA - 50 130114	1 Madiso Recei Teste	ved : 21	May23/24	0ct3/23	3025 V	
normal Laborato Sample N Lab Num	99461 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10	arCheck USA - 50 130114 217255	Recei	ved : 21 d : 21	r, NC 27513 J Jun 2024		3025 V SPART	ER HANNIFII V CROFT CII

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

Contact/Location: Service Manager - PARSPAKC

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