

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

9353874 (S/N 2186)

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

DIAGNOSIS

Recommendation

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 moderate amount of silt (particulates < 14 microns in size) 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		KC131322	KC125705	
Sample Date		Client Info		12 Jun 2024	13 Mar 2024	
Machine Age	hrs	Client Info		326	133	
Oil Age	hrs	Client Info		326	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				ATTENTION	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	
Chromium	ppm	ASTM D5185m	>10	<1	0	
Nickel	ppm	ASTM D5185m	>3	<1	<1	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	<1	0	
Aluminum	ppm	ASTM D5185m	>10	3	<1	
Lead	ppm	ASTM D5185m	>10	1	0	
Copper	ppm	ASTM D5185m	>50	3	<1	
Tin	ppm	ASTM D5185m	>10	<1	<1	
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	12	38	
Molybdenum	ppm	ASTM D5185m		<1	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	90	65	81	
Calcium	ppm	ASTM D5185m	2	0	6	
Phosphorus	ppm	ASTM D5185m		4	4	
Zinc	ppm	ASTM D5185m		7	0	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	
Sodium	ppm	ASTM D5185m		12	13	
Potassium	ppm	ASTM D5185m	>20	18	10	
Water	%	ASTM D6304	>0.05	0.031	0.031	
ppm Water	ppm	ASTM D6304	>500	313	317	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		4448	3182	
Particles >6µm		ASTM D7647	>1300	<mark> </mark> 1323	675	
Particles >14µm		ASTM D7647	>80	68	34	
Particles >21µm		ASTM D7647	>20	18	5	
Particles >38µm		ASTM D7647	>4	0	1	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	<mark>)</mark> 19/18/13	19/17/12	
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.35	0.36	



OIL ANALYSIS REPORT

Particle Trend		VISUAL		method	limit/base	current	history1	history2
4μm 6μm	V	Vhite Metal	scalar	*Visual	NONE	NONE	NONE	
 		ellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Precipitate	scalar	*Visual	NONE	NONE	NONE	
		Silt	scalar	*Visual	NONE	NONE	NONE	
		Debris	scalar	*Visual	NONE	NONE	NONE	
	S	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
3/24	A 5/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Mar13,24		Ddor	scalar	*Visual	NORML	NORML	NORML	
	E	Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Water (KF)		Free Water	scalar	*Visual		NEG	NEG	
Severe		FLUID PROPER		method	limit/base	current	history1	history2
		/isc @ 40°C	cSt	ASTM D445	46	44.6	44.5	
		SAMPLE IMAGE						history
		SAMPLE IMAGE	5	method	limit/base	current	history1	history2
Abnormal ++ to ZE	2/24	Color				a.	s.	no image
Mar13/24	Jun12/24							
Acid Number		Bottom						
Base		DOLLOTT						no image
		GRAPHS						
		Ferrous Alloys				Particle Count		
	10-				491,520			T ²
	8.	iron			122,880			-2
Mar13/24	m dd				122,000			14
Mar1	4				30,720			-2
Water (KF)	2.				7,680	N .		2
	0.	724						-11
Severe		Mar13/24			Jun 12/24 % [per 1 ml]			-1
		≥ Non-ferrous Meta	c		Jun12/24 particles (per 1 ml) 088		N 100	1
	10-		5		of part			
	8.	copper			jag 120			-1
	E 6.	tin			12 30			
Abnormal	۵۰ 4.							
/24	<u>ج</u> 2۰				8	Sizvez mal	\backslash	-1
Mar13/24	<u>-</u> 0-	4						-
		Mar13/24			Jun12/24			
Viscosity @ 40°C					۲ 0 ₄	и 6µ	14µ 21µ	38µ 71µ
Abnormal	55-	Viscosity @ 40°C			0.50	Acid Number		
		Abnormal			(B) 0.50 (H) 0.40	Base		
Base	50 · ي	Base			<u>ي</u> 0.40 ق 0.30			
	() () () () () () () () () () () () () (1						
Abnormal	40-	Abnormal			9.00 August Augu	1		
	35.							
	¥ C	Mar13/24			Jun12/24	13/24		
Mar13/24		Mar			Jun1	Mar13/24		
	-		1 Madiso Recei Teste Diagr	ved : 21 d : 24	, NC 27513 Jun 2024 Jun 2024 Jun 2024			UNICATIOI 70 44TH ST ARWATER, US 337
Certificate L2367			Diagi	.24		y Doyan	Contact: Se	
	this sample report, con		ice at 1-8	00-237-1369).		Contaot. 06	au
	test methods that are o							
	s of conformity to specifi							

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