

OIL ANALYSIS REPORT

Sample Rating Trend





Compressor

KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

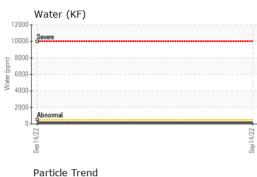
Fluid Condition

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

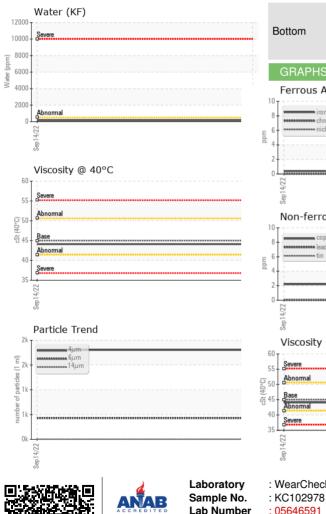
				Sep2022		
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC102978		
Sample Date		Client Info		14 Sep 2022		
Machine Age	hrs	Client Info		1917		
Oil Age	hrs	Client Info		1917		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>50	2		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0		
Barium	ppm	ASTM D5185m	90	2		
Molybdenum	ppm	ASTM D5185m	0	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	100	36		
Calcium	ppm	ASTM D5185m	0	<1		
Phosphorus	ppm	ASTM D5185m	0	<1		
Zinc	ppm	ASTM D5185m	0	1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1		
Sodium	ppm	ASTM D5185m	20	10		
Potassium	ppm	ASTM D5185m	>20	4		
Water	%	ASTM D6304	>0.05	0.016		
ppm Water	ppm	ASTM D6304	>500	167.4		
FLUID CLEANLIN		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1803		
Particles >6µm		ASTM D7647	>1300	426		
Particles >14µm		ASTM D7647	>80	4		
Particles >21µm		ASTM D7647		0		
Particles >38µm		ASTM D7647	>4	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	18/16/9		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.35		
	iiiy NO∏/y	AO HVI DOU40	1.0	0.00		



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VISUAL		method	limit/base	current	history1	history2
/hite Metal	scalar	*Visual	NONE	NONE		
ellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D445	45	44.1		
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color					no image	no image
Bottom				\bigcirc	no image	no image
GRAPHS						
Ferrous Alloys			10.450-623 (F	Particle Coun	t	11.535
iron i			491,520	I		726
chromium			122,880	-		-24
			30,720			-22
+						
22			7,680 22 Ē	1		-20
Sep 14/22			Sep 14/22 (per 1 ml)		、	-18
Non-ferrous Metals	-		Sep14/22 8ep14/22 150 150 150 170		N	-18 +16 +14
T	•		of par			
copper			jag 120		N	-14
tin			E 30			-12
						-10
				Bioreve mal	1	
Sep14/22			4/22			-8
Sep 1			Sep14/22	4μ 6μ		6
Viscosity @ 40°C				بۇ مۇ Acid Number	14μ 21μ	38µ 71µ
Severe						
Abnormal			0.96			
Base			Ē 0.72			
Abnormal			(b)HO 36 (b)HO 36 (c) 40 (c) 4			
Severe						
Sep14/22			Sep14/22	Sep14/22		6 * *
dag			Sep 1	Sep		•

: 20 Sep 2022

: 22 Sep 2022



Lab Number : 05646591 Unique Number : 10141130 Test Package : IND 2 Certificate L2367

Diagnostician : Jonathan Hester To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

Recieved

Diagnosed

Contact/Location: Service Manager - HAMAKR

2741 WINGATE AVE

Contact: Service Manager

AKRON, OH

US 44314

T:

F: