

OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

Machine Id KAESER AS 30 6039051 (S/N 1012)

Component Compressor Fluid

KAESER SIGMA (OEM) M-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 oil viscosity is higher than normal. The AN level is acceptable for this fluid.

	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA018796	KCP43503	KCP26275
Sample Date		Client Info		03 Jun 2024	07 Jan 2022	17 Feb 2020
Machine Age	hrs	Client Info		33843	10059	8188
Oil Age	hrs	Client Info		13000	2000	3000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	1	2
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	8	23	19
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Antimony	ppm	ASTM D5185m	-		0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	PPm			-	÷	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	3	5	36
Calcium	ppm	ASTM D5185m	0	0	0	<1
Phosphorus	ppm	ASTM D5185m	0	6	0	2
Zinc	ppm	ASTM D5185m	0	0	13	39
Sulfur	ppm	ASTM D5185m	23500	17883	17464	17916
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	1	<1
Sodium	ppm	ASTM D5185m		0	2	18
Potassium	ppm	ASTM D5185m	>20	1	0	0
\A/atau	%	ASTM D6304	0.0=		0.007	0.010
vvater	70	AGTIVI D0004	>0.05	0.003	0.007	0.010
	ppm	ASTM D6304	>0.05 >500	0.003 27	0.007 75.8	102.2
	ppm					102.2
ppm Water FLUID CLEANLIN	ppm	ASTM D6304	>500	27	75.8	102.2
ppm Water FLUID CLEANLIN Particles >4µm	ppm	ASTM D6304 method	>500 limit/base	27 current	75.8 history1	102.2 history2
ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm	ASTM D6304 method ASTM D7647	>500 limit/base	27 current 6787	75.8 history1 8907	102.2 history2 8511
ppm Water FLUID CLEANLIN Particles >4μm Particles >6μm Particles >14μm	ppm	ASTM D6304 method ASTM D7647 ASTM D7647	>500 limit/base >1300 >80	27 current 6787 1940	75.8 history1 8907 ▲ 2169	102.2 history2 8511 ▲ 2836
ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm	ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647	>500 limit/base >1300 >80	27 current 6787 ● 1940 ▲ 169	75.8 history1 8907 ▲ 2169 ▲ 185	102.2 history2 8511 ▲ 2836 ▲ 222
Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm	ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>500 limit/base >1300 >80 >20 >4	27 current 6787 ● 1940 ▲ 169 ▲ 48	75.8 history1 8907 ▲ 2169 ▲ 185 ▲ 46	102.2 history2 8511 ▲ 2836 ▲ 222 ▲ 53
ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm	ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>500 limit/base >1300 >80 >20 >4	27 current 6787 ● 1940 ▲ 169 ▲ 48 4	75.8 history1 8907 ▲ 2169 ▲ 185 ▲ 46 2	102.2 history2 8511 ▲ 2836 ▲ 222 ▲ 53 ▼7
ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm IESS	ASTM D6304 method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>500 limit/base >1300 >80 >20 >4 >3	27 <u>current</u> 6787 ● 1940 ▲ 169 ▲ 48 4 0	75.8 history1 8907 ▲ 2169 ▲ 185 ▲ 46 2 0	102.2 history2 8511 ▲ 2836 ▲ 222 ▲ 53 ● 7 4

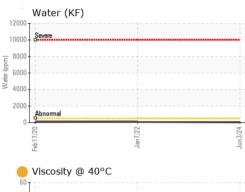
Report Id: BTGDEP [WUSCAR] 06203412 (Generated: 06/11/2024 19:00:13) Rev: 1

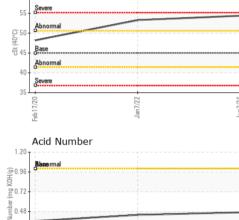
Contact/Location: TIM HARTJES - BTGDEP

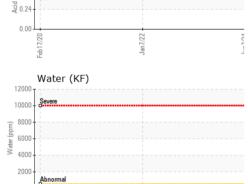
KAESER COMPRESSORS

Built for a lifetime."

Particle Trend







Feb 1

OIL ANALYSIS REPORT

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
FLUID PROPERT Visc @ 40°C	IES cSt	method ASTM D445	limit/base	current	history1	history2 48.2
	cSt					
Visc @ 40°C	cSt	ASTM D445	45	5 4.4	53.3	48.2

GRAPHS Ferrous Alloys Particle Count 10 491 520 122,880 nicke 30,720 7,680 20 8 Jun3/24 Feb17/20 4406 (per 1 an 1,920 Non-ferrous Metals 480 25 120 20 15 30 Feb17/20 Jan7/22 Viscosity @ 40°C Acid Number (B/1.20 HOX 0.96 Severe 55 () 00 50 Abnormal E 0.72 Base 45 · 은 0.48 SS Abnorm LIN 0.24 40 Seve 0.00 P 35 Jan7/22 -Jan7/22 -Jun3/24 Feb17/20 3/74 Feb 17 Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 BTG 1375 PLANE SITE BLVD Sample No. : KCPA018796 Received : 07 Jun 2024 Lab Number : 06203412 Tested : 11 Jun 2024 DE PERE, WI : 11 Jun 2024 - Angela Borella Unique Number : 11070873 Diagnosed US 54115 Test Package : IND 2 (Additional Tests: KF, PrtCount) Contact: TIM HARTJES

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)

Report Id: BTGDEP [WUSCAR] 06203412 (Generated: 06/11/2024 19:00:13) Rev: 1

Certificate 12367

Contact/Location: TIM HARTJES - BTGDEP

Т:

F:

tim.hartjes@btg.com