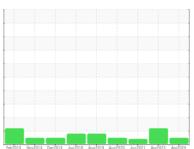


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

KAESER SFC 55 4786653 (S/N 2535)

Component Compressor

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

Recommendation

Oil and 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

The amount and size of particulates present in the system are acceptable.

Fluid Condition

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

Sample Number Client Info KCPA017168 KCP53690 KCP38855 Sample Date Client Info 15 Apr 2024 14 Apr 2023 0.4 Jun 207 Machine Age hrs Client Info 0 4506 43187 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0 4506 4341 0.0			Feb 2014 No	v2014 Dec2014 Jun2018	Aug2019 Aug2020 Jun2021 Apr202	3 Apr2024	
Sample Date Client Info 15 Apr 2024 14 Apr 2023 04 Jun 203	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info O 4506 4341 A506 A341 A506 A341 A506 A341 A506 A341 A506 A5406 A5406	Sample Number		Client Info		KCPA017168	KCP53690	KCP35855
Oil Age hrs Client Info 0 4506 4341 Oil Changed Client Info Changed Not Changed Not Changed Sample Status Client Info Changed Not Changed Not Changed WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >50 0 0 <1 Chromium ppm ASTM D5185m >50 0 0 <1 Nickel ppm ASTM D5185m >10 <1 0 0 Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >2 <1 0 0 Caded ppm ASTM D5185m >10 <1 0 0 Cubed ppm ASTM D5185m >10 <1 0 <1 Vanadium ppm ASTM D5185m >10 <1 0 <1	Sample Date		Client Info		15 Apr 2024	14 Apr 2023	04 Jun 2021
Oil Changed Sample Status	Machine Age	hrs	Client Info		46190	41664	34187
Oil Changed Sample Status Client Info Changed NORMAL Not Changd ATTENTION Not Changd ABNORMA WEAR METALS method limit/bass current history1 history1 Iron ppm ASTM D5185m >50 0 0 <1	Oil Age	hrs	Client Info		0	4506	4341
NORMAL ATTENTION ABNORM			Client Info		Changed	Not Changd	Not Changd
Iron						ATTENTION	ABNORMAL
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>50	0	0	<1
Titanium ppm ASTM D5185m >3 <1 0 0 Silver ppm ASTM D5185m >2 <1	Chromium	ppm	ASTM D5185m	>10	<1	0	0
Titanium	Nickel	ppm	ASTM D5185m	>3	<1	<1	0
Silver ppm ASTM D5185m >2 <1 0 0 Aluminum ppm ASTM D5185m >10 3 <1	Titanium		ASTM D5185m	>3	<1	0	0
Aluminum							
Lead ppm ASTM D5185m >10 <1				. –			
Copper ppm ASTM D5185m >50 2 8 11 Tin ppm ASTM D5185m >10 <1					_		
Tin							
Antimony ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 90 0 0 0 Molybdenum ppm ASTM D5185m 90 1 0 0 Manganese ppm ASTM D5185m 90 1 2 2 Magnesium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m >25 <1 0 <1 Sodium ppm <td>• • • • • • • • • • • • • • • • • • • •</td> <td></td> <td></td> <td></td> <th>_</th> <td></td> <td></td>	• • • • • • • • • • • • • • • • • • • •				_		
Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 90 0 0 0 Molybdenum ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 90 1 2 2 Calcium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 0 0 0 0 Sulfur ppm ASTM D5185m 25 <1 0 <1 CONTAMINANTS method l				>10			
Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 <1	•						
ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 0 0 <1							
Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 90 0 0 0 Molybdenum ppm ASTM D5185m <1	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium ppm ASTM D5185m 90 0 0 0 Molybdenum ppm ASTM D5185m <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m <1 0 0 Manganese ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 90 1 2 2 Calcium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 3 7 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 <1 0 <1 1 Sodium ppm ASTM D5185m >25 <1 0 <1 1 Potassium ppm ASTM D5185m >20 2 <1 <1 Water % ASTM D6304 >0.05 0.004 0.004 0.006 <	Boron	ppm	ASTM D5185m		0	0	<1
Manganese ppm ASTM D5185m <1 <1 0 Magnesium ppm ASTM D5185m 90 1 2 2 Calcium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 3 7 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 <1	Barium	ppm	ASTM D5185m	90	0	0	0
Magnesium ppm ASTM D5185m 90 1 2 2 Calcium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 3 7 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 <1	Molybdenum	ppm	ASTM D5185m		<1	0	0
Calcium ppm ASTM D5185m 2 0 0 8 Phosphorus ppm ASTM D5185m 0 3 7 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >25 <1	Manganese	ppm	ASTM D5185m		<1	<1	0
Phosphorus ppm ASTM D5185m 0 3 7 Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history3 Silicon ppm ASTM D5185m >25 <1 0 <1 1 Sodium ppm ASTM D5185m >25 <1 0 <1 1 Potassium ppm ASTM D5185m >20 2 <1 <1 Water % ASTM D5185m >20 2 <1 <1 Water % ASTM D6304 >0.05 0.004 0.004 0.006 ppm Water ppm ASTM D6304 >500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >1300 338	Magnesium	ppm	ASTM D5185m	90	1	2	2
Zinc ppm ASTM D5185m 0 0 0 Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >25 <1	Calcium	ppm	ASTM D5185m	2	0	0	8
Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Phosphorus	ppm	ASTM D5185m		0	3	7
Sulfur ppm ASTM D5185m 18031 21293 15194 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Zinc	ppm	ASTM D5185m		0	0	0
Silicon ppm ASTM D5185m >25 <1 0 <1 Sodium ppm ASTM D5185m 0 <1 1 Potassium ppm ASTM D5185m >20 2 <1 <1 Water % ASTM D6304 >0.05 0.004 0.004 0.006 ppm Water ppm ASTM D6304 >500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 1604 2392 Particles >6µm ASTM D7647 >1300 338 917 Particles >14µm ASTM D7647 >80 19 110 Particles >21µm ASTM D7647 >20 6 27	Sulfur		ASTM D5185m		18031	21293	15194
Sodium ppm ASTM D5185m 0 <1 1 Potassium ppm ASTM D5185m >20 2 <1	CONTAMINANTS	3	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 <1 <1 Water % ASTM D6304 >0.05 0.004 0.004 0.006 ppm Water ppm ASTM D6304 >500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4μm ASTM D7647 1604 2392 Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Water % ASTM D6304 > 0.05 0.004 0.004 0.006 ppm Water ppm ASTM D6304 > 500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 history1 Particles >4μm ASTM D7647 1604 2392 Particles >6μm ASTM D7647 > 1300 338 917 Particles >14μm ASTM D7647 > 80 19 110 Particles >21μm ASTM D7647 > 20 6 27	Sodium	ppm	ASTM D5185m		0	<1	1
Water % ASTM D6304 >0.05 0.004 0.004 0.006 ppm Water ppm ASTM D6304 >500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4μm ASTM D7647 1604 2392 Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	Potassium	ppm	ASTM D5185m	>20	2	<1	<1
ppm Water ppm ASTM D6304 >500 46 49.3 60.3 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4μm ASTM D7647 1604 2392 Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	Water	%	ASTM D6304	>0.05	0.004	0.004	0.006
Particles >4μm ASTM D7647 1604 2392 Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	ppm Water	ppm	ASTM D6304	>500	46	49.3	60.3
Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >6μm ASTM D7647 >1300 338 917 Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27	Particles >4µm		ASTM D7647		1604	2392	
Particles >14μm ASTM D7647 >80 19 110 Particles >21μm ASTM D7647 >20 6 27			ASTM D7647	>1300	338	917	
Particles >21μm ASTM D7647 >20 6 27	Particles >14µm		ASTM D7647	>80	19		
	·			>20		27	
Particles >38µm ASTM D7647 >4 1 3	Particles >38µm		ASTM D7647			3	
Particles >71µm	•						
Oil Cleanliness ISO 4406 (c) >/17/13 18/16/11 • 18/17/14							
FLUID DEGRADATION method limit/base current history1 history	FLUID DEGRADA	ATION_	method	limit/base	current	history1	history2

0.48



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06156949

: KCPA017168 Unique Number : 10992372

Received **Tested** Diagnosed

: 22 Apr 2024 : 23 Apr 2024

: 24 Apr 2024 - Angela Borella

2045 WOODDALE DR WOODBURY, MN US 55125 Contact:

Test Package : IND 2 (Additional Tests: KF, PrtCount) 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)

AVEKA

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