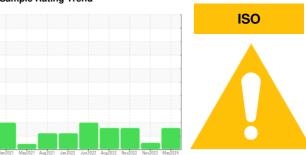


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER 7430983

Component Compressor

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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

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 Date			Jan2021 Ma	y2021 Aug2021 Jan2022	Jun2022 Aug2022 Nov2022 Nov20.	23 May2024	
Sample Date Client Info 30 May 2024 08 Nov 2023 07 Nov 2022	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 11119 9308 5960 Oil Age hrs Client Info 2000 0 1000 Oil Changed Client Info Changed N/A Changed ABNORMAL NORMAL ABNORMAL ABNORMAL WEAR METALS method fimit/base current history1 history2 Iron ppm ASTM 05185m >50 2 0 0 O Oil Chromium ppm ASTM 05185m >10 <1 0 0 Oil Changed ASTM 05185m >3 0 0 Oil Chromium ppm ASTM 05185m >3 0 0 Oil Chromium ppm ASTM 05185m >3 0 Oil Chromium ppm ASTM 05185m >3 <1 0 0 Oil Chromium ppm ASTM 05185m >3 <1 0 0 Oil Chromium ppm ASTM 05185m >3 <1 0 Oil Chromium ppm ASTM 05185m >10 2 <1 <1 <1 <1 <1 <1 <1	Sample Number		Client Info		KCPA018001	KCPA006470	KCP47900D
Oil Age hrs Client Info 2000 0 1000 Oil Changed Sample Status Client Info Changed ABNORMAL N/A Changed Changed N/A Change Shall Shal	Sample Date		Client Info		30 May 2024	08 Nov 2023	07 Nov 2022
Oil Age hrs Client Info 2000 0 1000 Oil Changed Sample Status Client Info Changed ABNORMAL N/A Changed Changed N/A Change Shall Shal	Machine Age	hrs	Client Info		•	9308	5960
Client Info Changed N/A NORMAL ABNORMAL NORMAL ABNORMAL NORMAL ABNORMAL NORMAL ABNORMAL NORMAL NORMAL		hrs	Client Info		2000	0	1000
Sample Status Method limit/base current history1 history2 Iron ppm ASTM D5185m >50 2 0 0 Chromium ppm ASTM D5185m >50 2 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Titanium ppm ASTM D5185m >3 <1	•		Client Info		Changed	N/A	Changed
Iron	Sample Status					NORMAL	_
Chromium ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >10 <1 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Tittanium 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 0 Copper ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >10 <1 <1 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 <th>Iron</th> <td>mag</td> <td>ASTM D5185m</td> <td>>50</td> <th>2</th> <td>0</td> <td>0</td>	Iron	mag	ASTM D5185m	>50	2	0	0
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Silver					-		
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Calcium ppm ASTM D5185m 0 0 2 0 Phosphorus ppm ASTM D5185m 0 12 1 <1	Manganese	ppm	ASTM D5185m		0	0	0
Phosphorus ppm ASTM D5185m 0 12 1 <1 Zinc ppm ASTM D5185m 0 6 0 2 Sulfur ppm ASTM D5185m 23500 20949 19210 23257 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Magnesium	ppm	ASTM D5185m	100	75	75	78
Zinc ppm ASTM D5185m 0 6 0 2 Sulfur ppm ASTM D5185m 23500 20949 19210 23257 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m >20 4 1 0 Vater ppm ASTM D5185m >20 4 1 0 Water % ASTM D6304 >0.05 0.020 0.018 0.174 ppm Water ppm ASTM D6304 >500 202 188.5 1740 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >100 4320 875 318 Particles >21µm ASTM D7647 >80 235 47 14 Particles >21µm ASTM D7647 >4 1 0 </td <th>Calcium</th> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <th>0</th> <td>2</td> <td>0</td>	Calcium	ppm	ASTM D5185m	0	0	2	0
Sulfur ppm ASTM D5185m 23500 20949 19210 23257 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Phosphorus	ppm	ASTM D5185m	0	12	1	<1
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1	Zinc	ppm	ASTM D5185m	0	6	0	2
Silicon ppm ASTM D5185m >25 <1 0 0 Sodium ppm ASTM D5185m 15 6 6 Potassium ppm ASTM D5185m >20 4 1 0 Water % ASTM D6304 >0.05 0.020 0.018 △ 0.174 ppm Water ppm ASTM D6304 >500 202 188.5 △ 1740 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >1300 △ 4320 875 318 Particles >6µm ASTM D7647 >80 △ 235 47 14 Particles >21µm ASTM D7647 >20 34 9 2 Particles >38µm ASTM D7647 >3 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method </td <th>Sulfur</th> <td>ppm</td> <td>ASTM D5185m</td> <td>23500</td> <th>20949</th> <td>19210</td> <td>23257</td>	Sulfur	ppm	ASTM D5185m	23500	20949	19210	23257
Sodium ppm ASTM D5185m 15 6 6 Potassium ppm ASTM D5185m >20 4 1 0 Water % ASTM D6304 >0.05 0.020 0.018 △ 0.174 ppm Water ppm ASTM D6304 >500 202 188.5 △ 1740 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 11084 2718 2134 Particles >6μm ASTM D7647 >1300 △ 4320 875 318 Particles >14μm ASTM D7647 >80 △ 235 47 14 Particles >21μm ASTM D7647 >20 34 9 2 Particles >38μm ASTM D7647 >4 1 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/15	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 4 1 0 Water % ASTM D6304 >0.05 0.020 0.018 ▲ 0.174 ppm Water ppm ASTM D6304 >500 202 188.5 ▲ 1740 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 11084 2718 2134 Particles >6μm ASTM D7647 >1300 ▲ 4320 875 318 Particles >14μm ASTM D7647 >80 ▲ 235 47 14 Particles >21μm ASTM D7647 >20 34 9 2 Particles >38μm ASTM D7647 >3 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>25	<1	0	0
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Particles >4μm ASTM D7647 11084 2718 2134 Particles >6μm ASTM D7647 >1300 4320 875 318 Particles >14μm ASTM D7647 >80 235 47 14 Particles >21μm ASTM D7647 >20 34 9 2 Particles >38μm ASTM D7647 >4 1 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	ppm Water						
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Particles >21μm ASTM D7647 >20 34 9 2 Particles >38μm ASTM D7647 >4 1 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	4320	875	318
Particles >38μm ASTM D7647 >4 1 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>80	235	47	14
Particles >38μm ASTM D7647 >4 1 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 Δ 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>20	34	9	2
Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>4	1	0	0
Oil Cleanliness ISO 4406 (c) >/17/13 ▲ 21/19/15 19/17/13 18/15/11 FLUID DEGRADATION method limit/base current history1 history2	•			>3	0	0	0
	·						
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)						



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Lab Number Unique Number : 11070865

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

: KCPA018001 : 06203404

Received **Tested** Diagnosed

: 11 Jun 2024 : 11 Jun 2024 - Angela Borella

: 07 Jun 2024

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)

AMAZON.COM SERVICES LLC

1255 GATEWAY BLVD BELOIT, WI

US 53511 Contact: N. OSCHOFF

noschoff@amazon.com T:

F: