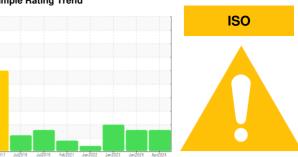


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER AIRCENTER SK 15 4258682 (S/N 1128)

Compressor

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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

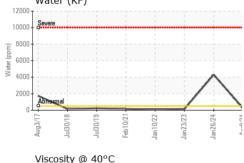
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

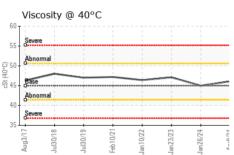
		Aug2017	Jul2018 Jul2019 Feb20	21 Jan2022 Jan2023 Jan2024	1 Apr2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC65240	KCPA011019	KCP55744
Sample Date		Client Info		09 Apr 2024	26 Jan 2024	23 Jan 2023
Machine Age	hrs	Client Info		28216	27756	25440
Oil Age	hrs	Client Info		460	0	0
Oil Changed		Client Info		Not Changd	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	2	0
Titanium	ppm	ASTM D5185m	>3	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	4
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	1	6	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	30	29	0
		AO HVI DO TOOIII	00	30	23	U
Molybdenum		ASTM D5185m	0	0	0	<1
Molybdenum	ppm					
	ppm	ASTM D5185m		0	0	<1
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	0	0 <1	0 <1	<1 <1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	100	0 <1 79	0 <1 57	<1 <1 65
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100	0 <1 79	0 <1 57 0	<1 <1 65 5
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 100 0 0	0 <1 79 2 0	0 <1 57 0 4	<1 <1 <1 65 5 4 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	0 100 0 0 0 limit/base	0 <1 79 2 0 0	0 <1 57 0 4 6 history1	<1 <1 65 5 4 0 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	0 100 0 0	0 <1 79 2 0 0 current 0	0 <1 57 0 4 6 history1 <1	<1 <1 65 5 4 0 history2 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 100 0 0 0 Iimit/base >25	0 <1 79 2 0 0 current 0 14	0 <1 57 0 4 6 history1 <1 5	<1 <1 65 5 4 0 history2 <1 19
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 100 0 0 0 limit/base >25 >20	0 <1 79 2 0 0 current 0 14 2	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 65 5 4 0 history2 <1 19 2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MSTM D5185m ASTM D6304	0 100 0 0 0 limit/base >25 >20 >0.05	0 <1 79 2 0 0 0 current 0 14 2 0.025	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 65 5 4 0 history2 <1 19 2 0.015
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	0 100 0 0 0 limit/base >25 >20 >0.05 >500	0 <1 79 2 0 0 Current 0 14 2 0.025 258	0 <1 57 0 4 6 history1 <1 5 2 △ 0.430 △ 4300	<1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 method	0 100 0 0 0 limit/base >25 >20 >0.05	0 <1 79 2 0 0 0 current 0 14 2 0.025 258 current	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	0 100 0 0 limit/base >25 >20 >0.05 >500 limit/base	0 <1 79 2 0 0 0 current 0 14 2 0.025 258 current 11301	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base	0 <1 79 2 0 0 0 current 0 14 2 0.025 258 current 11301 ▲ 4017	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base	0 <1 79 2 0 0 0 current 0 14 2 0.025 258 current 11301 ▲ 4017 ▲ 537	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847 ▲ 564
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20	0 <1 79 2 0 0 0 Current 0 14 2 0.025 258 Current 11301 ▲ 4017 ▲ 537 ▲ 161	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	0 <1 79 2 0 0 0 Current 0 14 2 0.025 258 Current 11301 △ 4017 △ 537 △ 161 4	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 △ 4847 △ 564 △ 138 △ 13
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	0 <1 79 2 0 0 current 0 14 2 0.025 258 current 11301 △ 4017 △ 537 △ 161 4 0	0 <1 57 0 4 6 history1 <1 5 2 △ 0.430 △ 4300 history1	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847 ▲ 564 ▲ 138 ▲ 13 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3 >/17/13	0 <1 79 2 0 0 0 Current 0 14 2 0.025 258 Current 11301 △ 4017 △ 537 △ 161 4	0 <1 57 0 4 6 history1 <1 5 2	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 100 0 0 0 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	0 <1 79 2 0 0 current 0 14 2 0.025 258 current 11301 △ 4017 △ 537 △ 161 4 0	0 <1 57 0 4 6 history1 <1 5 2 △ 0.430 △ 4300 history1	<1 <1 <1 65 5 4 0 history2 <1 19 2 0.015 156.2 history2 14460 ▲ 4847 ▲ 564 ▲ 138 ▲ 13 0

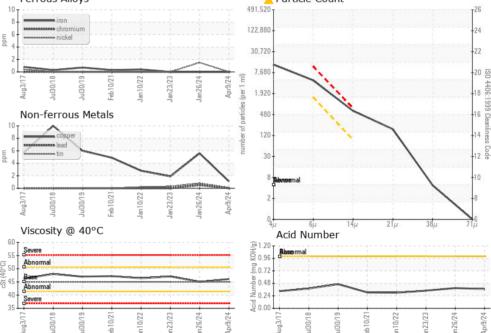


OIL ANALYSIS REPORT













Certificate 12367

Laboratory Sample No.

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : KC65240 Lab Number : 06154359 Unique Number : 10989782

Received : 19 Apr 2024 **Tested** : 22 Apr 2024

Diagnosed : 22 Apr 2024 - Doug Bogart **CREE VISUAL MARKETING CO**

1200 CROWLEY DR CARROLLTON, TX US 75006

Contact: Service Manager

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

 st - 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)

T:

F: