

OIL ANALYSIS REPORT

Sample Rating Trend ISO

Machine Id KAESER CSD 100S 7428867 (S/N 1050) Component Compressor

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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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.

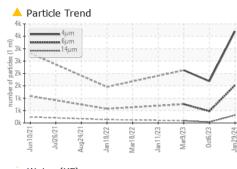
Fluid Condition

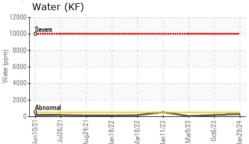
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

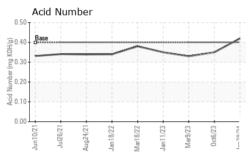
	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC122655	KC125393	KC108356
Sample Date		Client Info		29 Jan 2024	06 Oct 2023	09 Mar 2023
Machine Age	hrs	Client Info		12223	11683	10519
Oil Age	hrs	Client Info		0	0	6461
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ATTENTION
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	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	3	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	2	8	10
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	2	3	0
Molybdenum	ppm	ASTM D5185m	00	0	0	0
-				<1	0	0
Mandanese	ppm	ASTIVI UST850			U	U
0	ppm ppm	ASTM D5185m ASTM D5185m	90			÷
Magnesium	ppm	ASTM D5185m	90	52	27	1
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m		52 2	27 0	1 <1
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		52 2 32	27 0 2	1 <1 2
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2	52 2	27 0 2 47	1 <1 2 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 limit/base	52 2 32 8 current	27 0 2 47 history1	1 <1 2 0 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2	52 2 32 8 current <1	27 0 2 47 history1 <1	1 <1 2 0 history2 <1
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 limit/base >25	52 2 32 8 <u>current</u> <1 8	27 0 2 47 history1 <1 14	1 <1 2 0 history2 <1 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 limit/base >25 >20	52 2 32 8 <u>current</u> <1 8 5	27 0 2 47 history1 <1 14 11	1 <1 2 0 history2 <1 0 <1
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 limit/base >25 >20 >0.05	52 2 32 8 <u>current</u> <1 8 5 5 0.028	27 0 2 47 history1 <1 14 11 0.018	1 <1 2 0 history2 <1 0 <1 0 <1 0.006
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500	52 2 32 8 <u>current</u> <1 8 5	27 0 2 47 history1 <1 14 11 0.018 183.7	1 <1 2 0 history2 <1 0 <1 0.006 64.7
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05	52 2 32 8 current <1 8 5 0.028 285 current	27 0 2 47 history1 <1 14 11 0.018 183.7 history1	1 <1 2 0 history2 <1 0 <1 0,006 64.7 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500 limit/base	52 2 32 8 current <1 8 5 0.028 285 current 3701	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685	1 < 2 0 history2 <1 0 <1 0.006 64.7 history2 2130
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >20 >500 limit/base >1300	52 2 32 8 current <1 8 5 0.028 285 0.028 285 current 3701 ▲ 1520	27 0 2 47 	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80	52 2 32 8 current <1 8 5 0.028 285 0.028 285 current 3701 3701 3701 ↓ 1520 ▲ 316	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80	52 2 32 8 current <1 8 5 0.028 285 current 3701 ▲ 1520 ▲ 316 ▲ 135	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39 15	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90 50
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >20 >4	52 2 32 8 current <1 8 5 0.028 285 current 3701 ▲ 1520 ▲ 316 ▲ 135 ▲ 13	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39 15 1	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90 50 7
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >20 >4	52 2 32 8 current <1 8 5 0.028 285 current 3701 ▲ 1520 ▲ 135 ▲ 135 13 1	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39 15 1 5 1 0	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90 50 7 1
Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >20 >4	52 2 32 8 current <1 8 5 0.028 285 current 3701 ▲ 1520 ▲ 316 ▲ 135 ▲ 13	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39 15 1	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90 50 7
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 k ESS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	52 2 32 8 current <1 8 5 0.028 285 current 3701 ▲ 1520 ▲ 135 ▲ 135 13 1	27 0 2 47 history1 <1 14 11 0.018 183.7 history1 1685 476 39 15 1 5 1 0	1 <1 2 0 history2 <1 0 <1 0.006 64.7 history2 2130 759 90 50 7 1

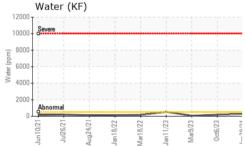
- T · COMPRESSOR Built for a lifetime

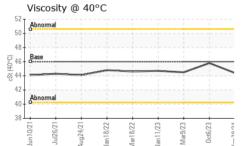
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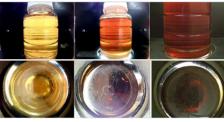




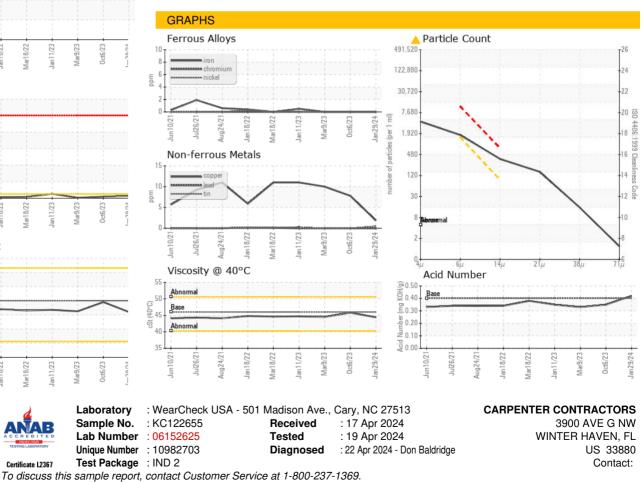


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Visc @ 40°C	cSt	ASTM D445	46	44.4	45.8	44.5
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color



Bottom



Unique Number : 10982703 Test Package : IND 2 Certificate 12367

* - 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: CARWINFL [WUSCAR] 06152625 (Generated: 04/23/2024 14:10:08) Rev: 1

Contact/Location: ? ? - CARWINFL

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