

## **OIL ANALYSIS REPORT**

Sample Rating Trend WATER

### Machine Id KAESER AIRTOWER 7.5C 7898456 (S/N 1259)

Compressor

Fluid KAESER SIGMA (OEM) M-460 (--- QTS)

#### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

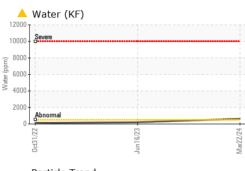
#### Fluid Condition

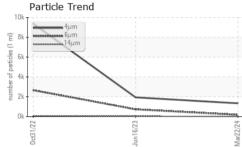
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

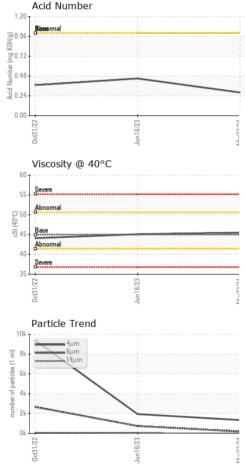
	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA015696	KCPA002007	KCP40317D
Sample Date		Client Info		22 Mar 2024	16 Jun 2023	31 Oct 2022
Machine Age	hrs	Client Info		1010	713	469
Oil Age	hrs	Client Info		541	0	469
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
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	0	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m		15	4	4
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m	-	<1	<1	0
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	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	16	65	35
Calcium	ppm	ASTM D5185m	0	<1	<1	0
		A OTH A DEVOE	0	2	4	4
Phosphorus	ppm	ASTM D5185m	0	-		4
	ppm ppm	ASTM D5185m ASTM D5185m		21	4	4
Zinc						
Zinc	ppm ppm	ASTM D5185m	0	21	4	4
Zinc Sulfur CONTAMINANTS	ppm ppm	ASTM D5185m ASTM D5185m	0 23500	21 21335	4 23572	4 19808
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m method	0 23500 limit/base	21 21335 current	4 23572 history1	4 19808 history2
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	0 23500 limit/base	21 21335 current <1	4 23572 history1 0	4 19808 history2 1
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	0 23500 limit/base >25 >20	21 21335 current <1 11	4 23572 history1 0 15	4 19808 history2 1 14
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	0 23500 limit/base >25 >20 >20 >0.05	21 21335 current <1 11 2	4 23572 history1 0 15 1	4 19808 history2 1 14 <1
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	0 23500 limit/base >25 >20 >20 >0.05	21 21335 current <1 11 2 ▲ 0.063	4 23572 history1 0 15 1 0.021	4 19808 history2 1 14 <1 0.012
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	0 23500 limit/base >25 >20 >0.05 >500	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339	4 23572 history1 0 15 1 0.021 211.6	4 19808 history2 1 14 <1 0.012 124.5
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	0 23500 limit/base >25 >20 >0.05 >500 limit/base	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current	4 23572 history1 0 15 1 0.021 211.6 history1	4 19808 history2 1 14 <1 0.012 124.5 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	0 23500 limit/base >25 >20 >0.05 >500 limit/base	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339	4 23572 history1 0 15 1 0.021 211.6 history1 1939	4 19808 history2 1 14 <1 0.012 124.5 history2 9374
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339 186	4 23572 history1 0 15 1 0.021 211.6 history1 1939 732	4 19808 history2 1 14 <1 0.012 124.5 history2 9374 ▲ 2661
Zinc Sulfur 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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339 186 7	4 23572 history1 0 15 1 0.021 211.6 history1 1939 732 37	4 19808 history2 1 14 <1 0.012 124.5 history2 9374 ▲ 2661 ▲ 82
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339 186 7 0	4 23572 history1 0 15 1 0.021 211.6 history1 1939 732 37 3 0 0 0	4 19808 history2 1 14 <1 0.012 124.5 history2 9374 ▲ 2661 ▲ 2661 ▲ 82 7
Zinc Sulfur 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	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	0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339 186 7 0 0 0	4 23572 history1 0 15 1 0.021 211.6 history1 1939 732 37 3 3 0	4 19808 history2 1 14 <1 0.012 124.5 history2 9374 ▲ 2661 ▲ 82 7 0
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm % ppm ESS	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	0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	21 21335 current <1 11 2 ▲ 0.063 ▲ 630 current 1339 186 7 0 0 0 0 0	4 23572 history1 0 15 1 0.021 211.6 history1 1939 732 37 3 0 0 0	4 19808 history2 1 14 <1 0.012 124.5 history2 9374 ▲ 2661 ▲ 82 7 0 0 0



# **OIL ANALYSIS REPORT**

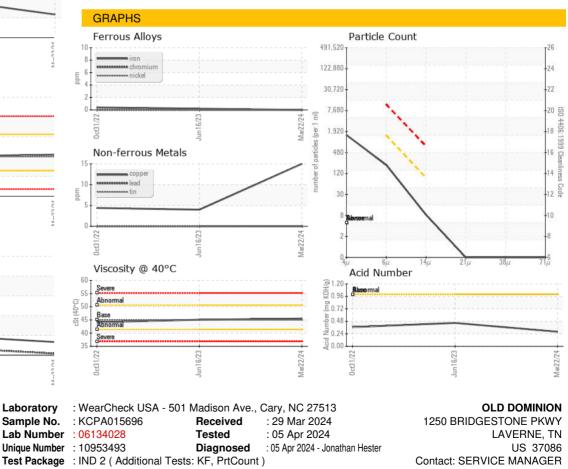






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	45.5	45.1	44.1
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Color						

Bottom



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: OLDLAV [WUSCAR] 06134028 (Generated: 04/05/2024 14:02:30) Rev: 1

Certificate 12367

Contact/Location: SERVICE MANAGER ? - OLDLAV

T:

F: