

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



Machine Id

# KAESER DS 171 1750008 (S/N 1128416)

Component Compressor Fluid

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

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

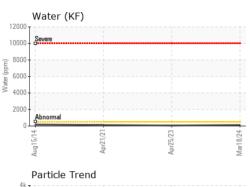
### Fluid Condition

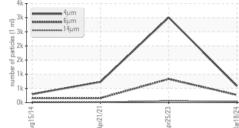
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

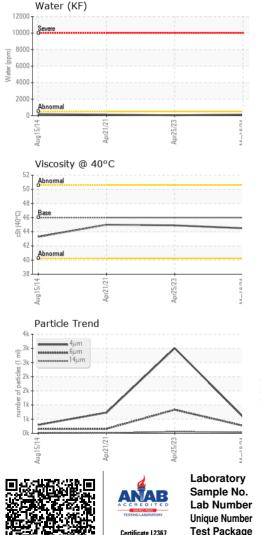
		Aug201				
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC122636	KC102030	KC86370
Sample Date		Client Info		18 Mar 2024	25 Apr 2023	21 Apr 2021
Machine Age	hrs	Client Info		92665	89671	82714
Oil Age	hrs	Client Info		0	7000	6000
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	<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	<1
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	2	8	5
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m				<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	1º Ie	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m	90	12	0	0
Molybdenum		ASTM D5185m	30	0	0	0
Manganese	ppm ppm	ASTM D5185m		<1	<1	<1
Magnesium		ASTM D5185m	90	38	4	5
Calcium	ppm ppm	ASTM D5185m		<1	0	0
Phosphorus		ASTM D5185m	2	0	0	8
Filosphorus				U		
	ppm			10		
Zinc	ppm	ASTM D5185m		10	19	13
Zinc	ppm	ASTM D5185m method	limit/base	current	19 history1	13 history2
Zinc CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m		current	19 history1 <1	13 history2 <1
Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	>25	current <1 17	19 history1 <1 2	13 history2 <1 3
Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	current <1 17 5	19 history1 <1 2 0	13 history2 <1 3 <1
Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm %	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>25 >20 >0.05	<pre>current &lt;1 17 5 0.013</pre>	19 history1 <1 2 0 0.005	13 history2 <1 3 <1 0.012
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>25 >20 >0.05 >500	Current <1 17 5 0.013 133	19 history1 <1 2 0 0.005 54.8	13 history2 <1 3 <1 0.012 124.0
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304	>25 >20 >0.05	current <1 17 5 0.013 133 current	19 history1 <1 2 0 0.005 54.8 history1	13 history2 <1 3 <1 0.012 124.0 history2
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647	>25 >20 >0.05 >500 limit/base	current <1 17 5 0.013 133 current 587	19 history1 <1 2 0 0.005 54.8 history1 3007	13 history2 <1 3 <1 0.012 124.0 history2 730
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base	current           <1           17           5           0.013           133           current           587           269	19 history1 <1 2 0 0.005 54.8 history1 3007 832	13 history2 <1 3 <1 0.012 124.0 history2 730 158
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	current           <1           17           5           0.013           133           current           587           269           36	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20	Current <1 17 5 0.013 133 Current 587 269 36 14	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58 58 14	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12 4
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	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current           <1           17           5           0.013           133           current           587           269           36           14           0	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12
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	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	Current <1 17 5 0.013 133 Current 587 269 36 14	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58 58 14	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12 4
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm % ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current           <1           17           5           0.013           133           current           587           269           36           14           0	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58 14 0	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12 4 0
Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm % ppm ESS	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	current           <1           17           5           0.013           133           current           587           269           36           14           0           0	19 history1 <1 2 0 0.005 54.8 history1 3007 832 58 14 0 0 0	13 history2 <1 3 <1 0.012 124.0 history2 730 158 12 4 0 0 0



## **OIL ANALYSIS REPORT**

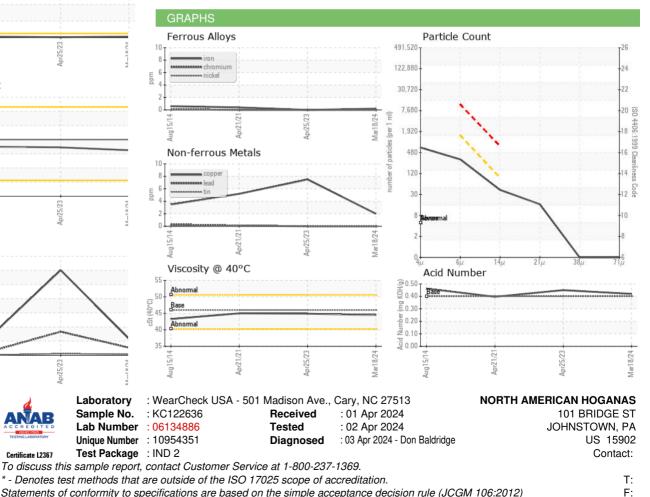






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	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	44.5	44.9	45.0
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color						

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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