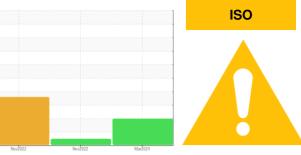


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER 7997306

Component Compressor Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The 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.

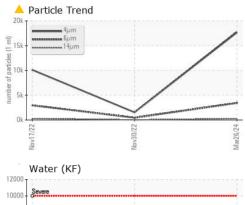
Fluid Condition

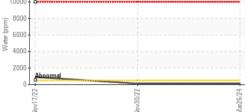
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

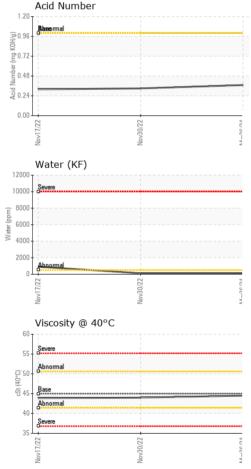
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC06153797	KC106455	KC106447
Sample Date		Client Info		26 Mar 2024	30 Nov 2022	17 Nov 2022
Machine Age	hrs	Client Info		4044	1911	1911
Oil Age	hrs	Client Info		0	1911	1911
Oil Changed		Client Info		N/A	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	0	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	1
Lead	ppm	ASTM D5185m	>10	1	0	<1
Copper	ppm	ASTM D5185m	>50	11	7	7
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	2	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	100	15	4	6
Calcium	ppm	ASTM D5185m	0	4	0	1
Phosphorus	ppm	ASTM D5185m	0	7	10	8
Zinc	ppm	ASTM D5185m	0	74	15	17
CONTAMINANTS						
		method	limit/base	current	history1	history2
Silicon	ppm		limit/base	current 1	<mark>history1</mark> 0	history2 <1
	ppm ppm				0	<1 4
Silicon		ASTM D5185m		1	0	<1
Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25	1 7	0	<1 4
Silicon Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20 >0.05	1 7 5	0 1 3	<1 4 5
Silicon Sodium Potassium Water	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>25 >20 >0.05	1 7 5 0.011	0 1 3 0.011	<1 4 5 ▲ 0.091
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647	>25 >20 >0.05 >500 limit/base	1 7 5 0.011 116 current 17682	0 1 3 0.011 115.6 history1 1538	<1 4 5 • 0.091 • 913.2 history2 10120
Silicon Sodium Potassium Water ppm Water FLUID CLEANLINI Particles >4µm Particles >6µm	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500	1 7 5 0.011 116 current	0 1 3 0.011 115.6 history1	<1 4 5 • 0.091 • 913.2 history2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLINI Particles >4µm Particles >6µm Particles >14µm	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441 ▲ 287	0 1 3 0.011 115.6 history1 1538 457 22	<1 4 5 0.091 913.2 history2 10120 2964 292
Silicon Sodium Potassium Water ppm Water FLUID CLEANLINI Particles >4µm Particles >6µm	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441	0 1 3 0.011 115.6 history1 1538 457	<1 4 5 0.091 • 913.2 history2 10120 • 2964
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm % ppm	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441 ▲ 287	0 1 3 0.011 115.6 history1 1538 457 22	<1 4 5 0.091 913.2 history2 10120 2964 292
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm % ppm	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	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441 ▲ 287 ▲ 100	0 1 3 0.011 115.6 history1 1538 457 22 7	<1 4 5 0.091 913.2 history2 10120 2964 292 107
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm % ppm	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	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441 ▲ 287 ▲ 100 ▲ 9	0 1 3 0.011 115.6 history1 1538 457 22 7 1	<1 4 5 0.091 913.2 10120 10120 2964 292 107 7
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm % ppm ESS	ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	1 7 5 0.011 116 <u>current</u> 17682 ▲ 3441 ▲ 287 ▲ 100 ▲ 9 1	0 1 3 0.011 115.6 history1 1538 457 22 7 1 0	<1 4 5 0.091 913.2 history2 10120 2964 292 107 7 0



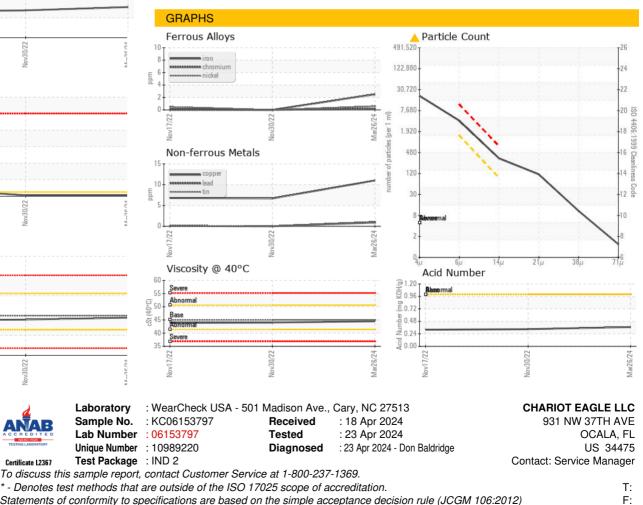
OIL ANALYSIS REPORT







VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
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	LIGHT
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	45	44.5	44.0	43.9
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						
Bottom						



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

Certificate 12367

Contact/Location: Service Manager - CHAOCA Page 2 of 2