

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

7664177 (S/N 1608)

Compressor

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.

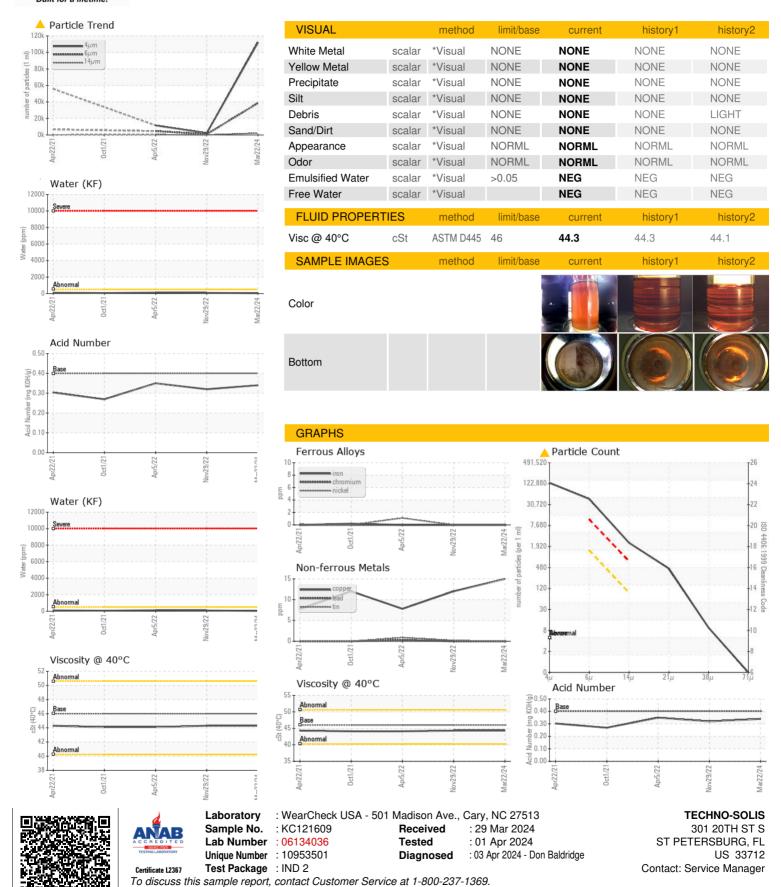
Fluid Condition

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

		Apr2021	0ct2021	Apr2022 Nov2022	Mar2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC121609	KC97309	KC86135
Sample Date		Client Info		22 Mar 2024	29 Nov 2022	05 Apr 2022
Machine Age	hrs	Client Info		17851	12404	9343
Oil Age	hrs	Client Info		0	3060	3334
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	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	0	1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	0	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	15	12	8
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		<1	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	0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	90	0	0 <1	0
-	ppm		90	-		
Magnesium Calcium	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m ASTM D5185m		0	<1	0
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	<1 0 10	0 0 7
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2	0 0 0 0	<1 0 10	0 0 7 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 limit/base	0 0 0 0 current	<1 0 10 0 history1	0 0 7 0 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25	0 0 0 0 current	<1 0 10 0 history1	0 0 7 0 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	0 0 0 0 current <1 2	<1 0 10 0 history1 <1 <1 <1	0 0 7 0 history2 <1 0 <1
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >25	0 0 0 0 current <1 2	<1 0 10 0 history1 <1 <1	0 0 7 0 history2 <1 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	2 limit/base >25 >20 >0.05	0 0 0 0 current <1 2 0 0.005	<1 0 10 0 history1 <1 <1 <1 <1 0.008	0 0 7 0 history2 <1 0 <1 0.011
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500	0 0 0 0 current <1 2 0 0.005 51	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2	0 0 7 0 history2 <1 0 <1 0.011 119.7
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	limit/base >25 >20 >0.05 >500 limit/base	0 0 0 0 current <1 2 0 0.005 51	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2 history1	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500 limit/base	0 0 0 0 current <1 2 0 0.005 51 current 111924	<1 0 10 0 history1 <1 <1 <1 0.008 85.2 history1 2185	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80	0 0 0 0 current <1 2 0 0.005 51 current 111924 ▲ 38578	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2 history1 2185 858	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2 11608 4681
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 ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method 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	0 0 0 0 0 current <1 2 0 0.005 51 current 111924 △ 38578 △ 2145	<1 0 10 0 history1 <1 <1 <1 0.008 85.2 history1 2185 858 59	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2 11608 4681 433
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25	0 0 0 0 current <1 2 0 0.005 51 current 111924 ▲ 38578 ▲ 2145 ▲ 394	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2 history1 2185 858 59 25	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2 11608 4681 433 123
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method 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	0 0 0 0 current <1 2 0 0.005 51 current 111924 △ 38578 △ 2145 △ 394 △ 8	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2 history1 2185 858 59 25 2	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2 11608 △ 4681 △ 433 △ 123 △ 9
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	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 Method ASTM D7647	2 limit/base >25	0 0 0 0 current <1 2 0 0.005 51 current 111924 △ 38578 △ 2145 △ 394 △ 8 0	<1 0 10 0 history1 <1 <1 <1 <1 0.008 85.2 history1 2185 858 59 25 2 0	0 0 7 0 history2 <1 0 <1 0.011 119.7 history2 11608 4681 433 123 9 1



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* - 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)

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