

OIL ANALYSIS REPORT



ISO

KAESER SX 5 7419538 (S/N 1210)

Compressor

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.

			Sep2021	Sep 2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA007941	KCP33905	
Sample Date		Client Info		26 Sep 2023	17 Sep 2021	
Machine Age	hrs	Client Info		4407	1250	
Oil Age	hrs	Client Info		0	1250	
Oil Changed	0	Client Info		N/A	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum		ASTM D5185m	>10	<1	0	
Lead	ppm	ASTM D5185m	>10	0	<1	
	ppm			_		
Copper	ppm	ASTM D5185m	>50	0	4	
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	
Barium	ppm	ASTM D5185m	90	85	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
		ASTM D5185m ASTM D5185m	0	0	0 <1	
Molybdenum	ppm		100			
Molybdenum Manganese	ppm	ASTM D5185m		0	<1	
Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	100	0 83	<1 20	
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	100	0 83 0	<1 20 0	
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 0 0	0 83 0	<1 20 0 5	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 0 0	0 83 0 0	<1 20 0 5 17	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 0 0 0 23500	0 83 0 0 0 19574 current	<1 20 0 5 17 16491 history1	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	100 0 0 0 23500 limit/base	0 83 0 0 0 19574 current	<1 20 0 5 17 16491 history1	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	100 0 0 0 23500 limit/base >25	0 83 0 0 0 19574 current 2	<1 20 0 5 17 16491 history1 0	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	100 0 0 0 23500 limit/base >25	0 83 0 0 0 19574 current 2 2	<1 20 0 5 17 16491 history1 0 11	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	100 0 0 0 23500 limit/base >25	0 83 0 0 0 19574 current 2	<1 20 0 5 17 16491 history1 0	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	100 0 0 0 23500 limit/base >25 >20 >0.05	0 83 0 0 0 19574 current 2 2 0 0.022	<1 20 0 5 17 16491 history1 0 11 12	 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D6304 ASTM D6304	100 0 0 0 23500 limit/base >25 >20 >0.05 >500	0 83 0 0 0 19574 current 2 2 0 0.022 223	<1 20 0 5 17 16491 history1 0 11 12 0.101 1010	history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 method	100 0 0 0 23500 limit/base >25 >20 >0.05 >500	0 83 0 0 0 19574 current 2 2 2 0 0.022 223	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	100 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base	0 83 0 0 0 19574 current 2 2 0 0.022 223 current 47790	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1 5501	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	100 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base	0 83 0 0 0 19574 current 2 2 0 0.022 223 current 47790 ▲ 12169 ▲ 273	<1 20 0 5 17 16491 history1 0 11 12 ▲ 0.101 ▲ 1010 history1 5501 1227 55	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	100 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20	0 83 0 0 0 19574 current 2 2 2 0 0.022 223 current 47790 ▲ 12169 ▲ 273 ▲ 21	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1 5501 1227 55 10	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur 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 ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	100 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	0 83 0 0 0 19574 current 2 2 0 0.022 223 current 47790 ▲ 12169 ▲ 273 ▲ 21 0	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1 5501 1227 55 10 0	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur 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 ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	100 0 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	0 83 0 0 0 19574 current 2 2 0 0.022 223 current 47790 12169 273 21 0 0	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1 5501 1227 55 10 0 0	history2 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	100 0 0 23500 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	0 83 0 0 0 19574 current 2 2 0 0.022 223 current 47790 ▲ 12169 ▲ 273 ▲ 21 0	<1 20 0 5 17 16491 history1 0 11 12 △ 0.101 △ 1010 history1 5501 1227 55 10 0	history2 history2



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: KCPA007941 : 06073997

Recieved : 10856088

: 30 Jan 2024 Diagnosed : 31 Jan 2024 Diagnostician : Doug Bogart

Test Package : IND 2 (Additional Tests: KF, PrtCount) 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)

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Contact: Service Manager

T:

F: