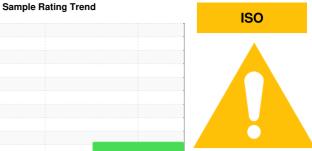


# **OIL ANALYSIS REPORT**



# KAESER AS 20 6521559 (S/N 1098)

Compressor

KAESER SIGMA (OEM) S-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.

			Nov2020	Feb2021		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KC85009	KC91475	
Sample Date		Client Info		08 Feb 2021	09 Nov 2020	
Machine Age	hrs	Client Info		18002	15987	
Oil Age	hrs	Client Info		5521	4000	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				ABNORMAL	ATTENTION	
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	<1	0	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	6	7	
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony	ppm	ASTM D5185m		0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	ррпп			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	90	0	<1	
Calcium	ppm	ASTM D5185m	2	0	0	
Phosphorus				· ·	U	
i nospiioras	ppm	ASTM D5185m		0	5	
Zinc	ppm ppm	ASTM D5185m ASTM D5185m				
	ppm		limit/base	0	5	
Zinc	ppm	ASTM D5185m	limit/base >25	0	5 0	
Zinc	ppm	ASTM D5185m  method		0 0 current	5 0 history1	history2
Zinc  CONTAMINANTS  Silicon	ppm	ASTM D5185m  method  ASTM D5185m		0 0 current	5 0 history1	history2
Zinc  CONTAMINANTS  Silicon  Sodium	ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25	0 0 current <1 0	5 0 history1 2 <1	history2
Zinc  CONTAMINANTS  Silicon  Sodium  Potassium	ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m	>25 >20	0 0 current <1 0	5 0 history1 2 <1 0	history2
Zinc  CONTAMINANTS  Silicon  Sodium  Potassium  Water	ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	>25 >20 >0.05	0 0 current <1 0 0 0.004	5 0 history1 2 <1 0 0.006	history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	>25 >20 >0.05 >500	0 0 current <1 0 0 0.004 46.8	5 0 history1 2 <1 0 0.006 62.6	 history2  
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  method	>25 >20 >0.05 >500 limit/base	0 0 current <1 0 0 0.004 46.8	5 0 history1 2 <1 0 0.006 62.6 history1	history2 history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm	MSTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  method  ASTM D7647	>25 >20 >0.05 >500 limit/base	0 0 current <1 0 0 0.004 46.8 current 3958	5 0 history1 2 <1 0 0.006 62.6 history1 9331	history2 history2 history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  method  ASTM D7647  ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	0 0 0 current <1 0 0 0.004 46.8 current 3958 ▲ 1506	5 0 history1 2 <1 0 0.006 62.6 history1 9331 ▲ 1498	history2 history2 history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm	Method  ASTM D5185m  Method  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  ASTM D6304  Method  ASTM D7647  ASTM D7647  ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80	0 0 0 current <1 0 0 0.004 46.8 current 3958 ▲ 1506 ▲ 176	5 0 history1 2 <1 0 0.006 62.6 history1 9331 ▲ 1498 62	history2 history2 history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm	Method  ASTM D5185m  Method  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  Method  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	0 0 0 current <1 0 0 0.004 46.8 current 3958 ▲ 1506 ▲ 176 ▲ 49	5 0 history1 2 <1 0 0.006 62.6 history1 9331 ▲ 1498 62 16	history2 history2
Zinc  CONTAMINANTS  Silicon Sodium Potassium Water ppm Water  FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  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	0 0 current <1 0 0 0.004 46.8 current 3958 1506 176 49 1	5 0 history1 2 <1 0 0.006 62.6 history1 9331 ▲ 1498 62 16	history2 history2
Zinc  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 gppm	ASTM D5185m  method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D6304  ASTM D6304  method  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647  ASTM D7647	>25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	0 0 0 current <1 0 0 0.004 46.8 current 3958  1506  176 49 1 0	5 0 history1 2 <1 0 0.006 62.6 history1 9331 ▲ 1498 62 16 1	history2 history2 history2

Acid Number (AN)

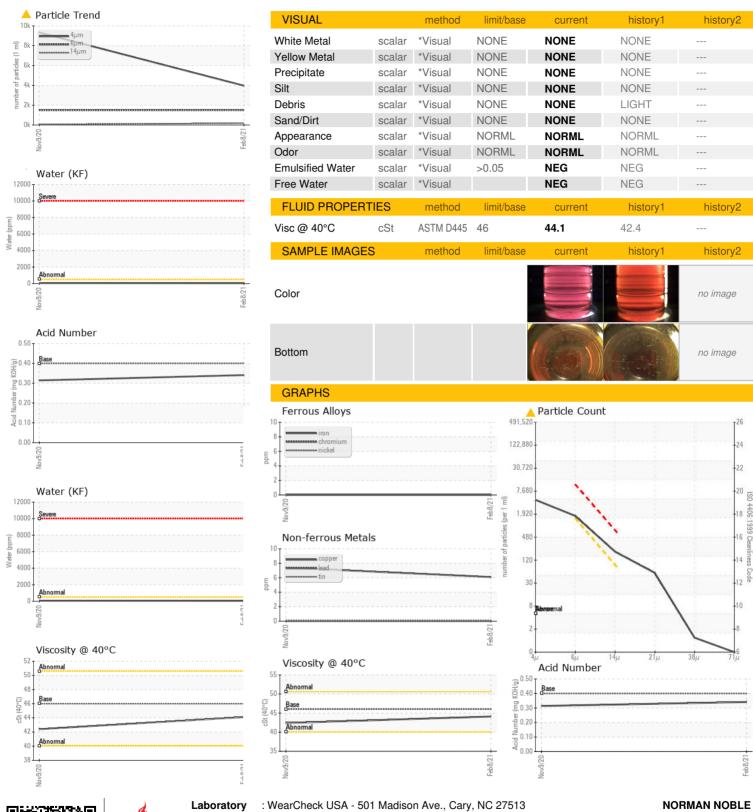
mg KOH/g ASTM D8045 0.4

0.314

0.341



## **OIL ANALYSIS REPORT**





Certificate L2367

Sample No. Lab Number

: KC85009 : 05181701

Unique Number : 9366990 Test Package : IND 2

Received : 12 Feb 2021 **Tested** 

Diagnosed

: 15 Feb 2021 : 15 Feb 2021 - Don Baldridge

5340 AVION PKWY HIGHLAND HEIGHTS, OH US 44143

Contact: Service Manager

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)

T: F: