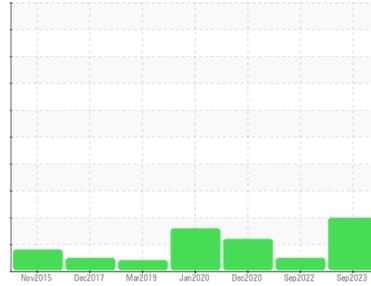




# PROBLEM SUMMARY

Sample Rating Trend



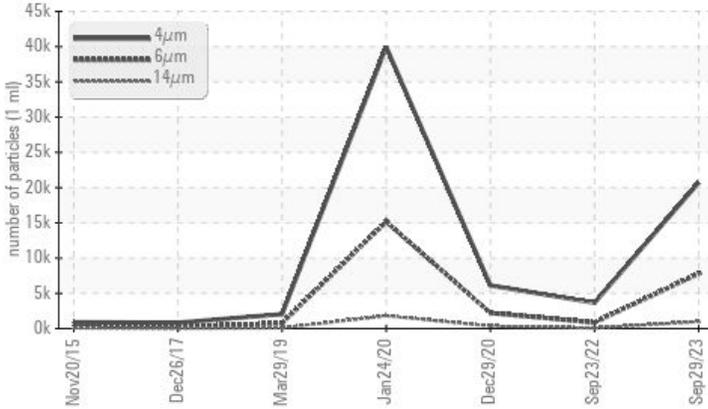
Machine Id  
**KAESER BSD 60 2795036 (S/N 1009)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 7781	866	▲ 2216
Particles >14µm	ASTM D7647	>80	▲ 995	56	▲ 353
Particles >21µm	ASTM D7647	>20	▲ 338	10	▲ 112
Particles >38µm	ASTM D7647	>4	▲ 13	1	3
Oil Cleanliness	ISO 4406 (c)	>17/13	▲ 20/17	17/13	▲ 18/16

Customer Id: SUNLAW  
Sample No.: KCPA001561  
Lab Number: 05997385  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 23 Sep 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 29 Dec 2020 Diag: Angela Borella

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 24 Jan 2020 Diag: Jonathan Hester

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

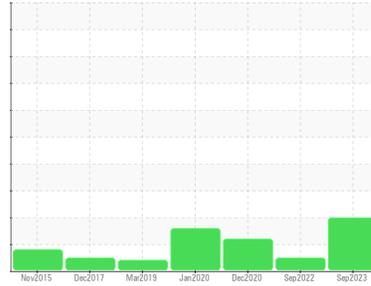
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**KAESER BSD 60 2795036 (S/N 1009)**

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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA001561</b>	KCP46297	KCP30320
Sample Date	Client Info		<b>29 Sep 2023</b>	23 Sep 2022	29 Dec 2020
Machine Age	hrs	Client Info	<b>47169</b>	43327	36823
Oil Age	hrs	Client Info	<b>0</b>	3244	3260
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>24</b>	10	5
Tin	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>&lt;1</b>	4	24
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	7	1
Zinc	ppm	ASTM D5185m 0	<b>6</b>	23	32
Sulfur	ppm	ASTM D5185m 23500	<b>23493</b>	24909	18074

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>3</b>	2	<1
Sodium	ppm	ASTM D5185m	<b>0</b>	0	4
Potassium	ppm	ASTM D5185m >20	<b>1</b>	1	0
Water	%	ASTM D6304 >0.05	<b>0.005</b>	0.009	0.012
ppm Water	ppm	ASTM D6304 >500	<b>53.1</b>	98.7	125.5

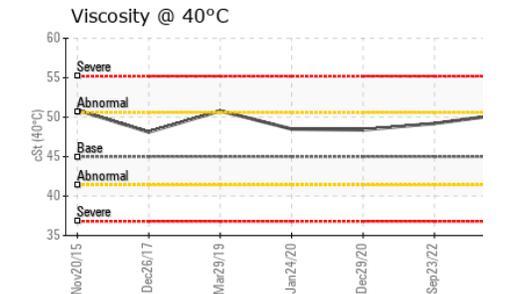
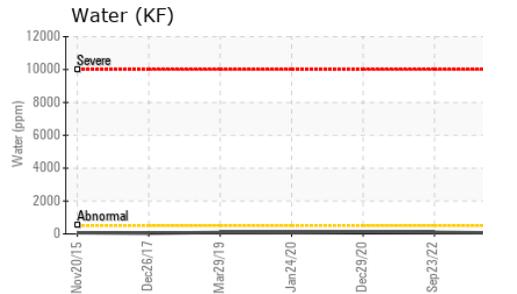
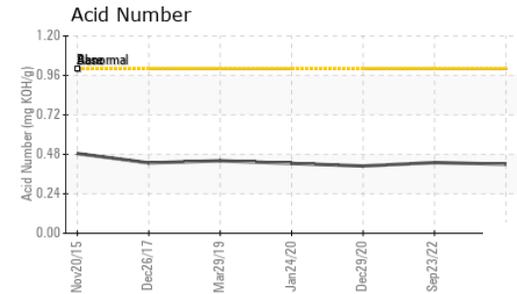
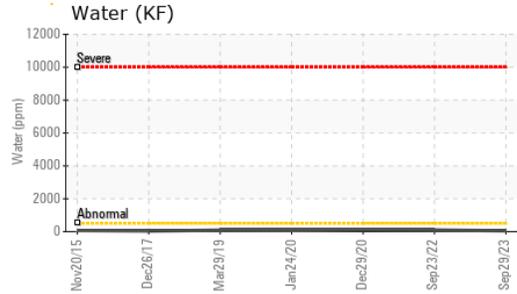
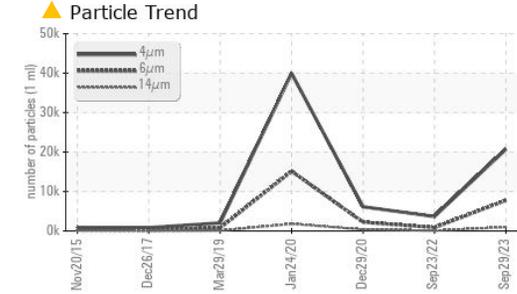
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>20708</b>	3663	6119
Particles >6µm	ASTM D7647	>1300	<b>▲ 7781</b>	866	▲ 2216
Particles >14µm	ASTM D7647	>80	<b>▲ 995</b>	56	▲ 353
Particles >21µm	ASTM D7647	>20	<b>▲ 338</b>	10	▲ 112
Particles >38µm	ASTM D7647	>4	<b>▲ 13</b>	1	3
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>17/13	<b>▲ 20/17</b>	17/13	▲ 18/16

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.42</b>	0.43	0.409

# OIL ANALYSIS REPORT



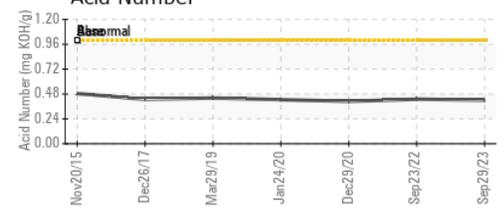
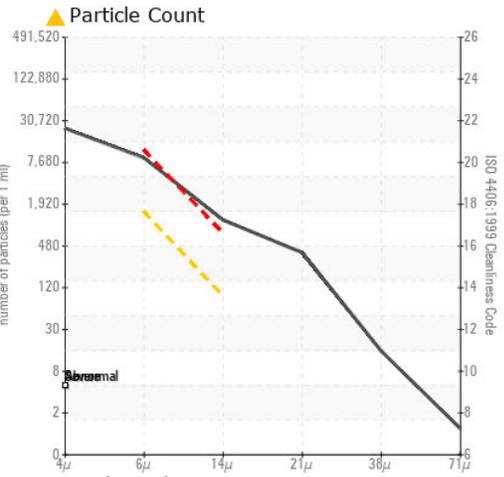
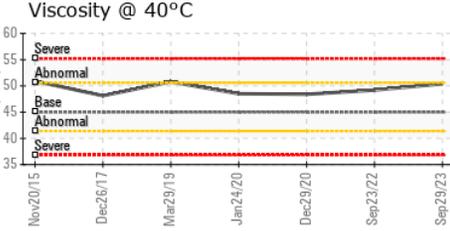
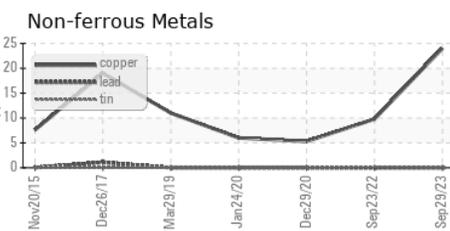
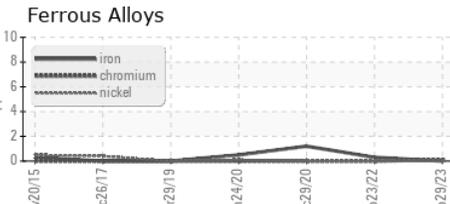
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	50.4	49.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA001561 **Received** : 02 Nov 2023  
**Lab Number** : 05997385 **Diagnosed** : 05 Nov 2023  
**Unique Number** : 10725745 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SUNBELT METAL PROCESSING INC**  
 361 INDUSTRIAL PARK DR  
 LAWRENCEVILLE, GA  
 US 30046  
 Contact: E. CHASE  
 echase@sunbeltmetal.com  
 T:  
 F:

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)