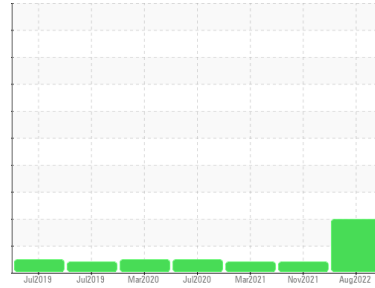




Machine Id  
**KAESER BSD 60T 6421616 (S/N 1237)**

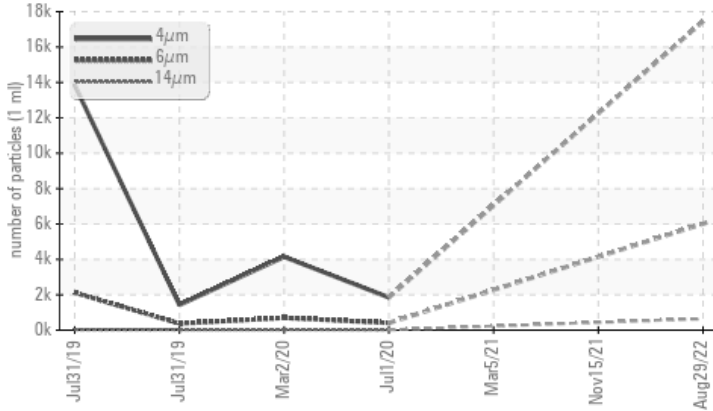
Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-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	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 6012	---	---
Particles >14µm	ASTM D7647	>80	▲ 641	---	---
Particles >21µm	ASTM D7647	>20	▲ 185	---	---
Particles >38µm	ASTM D7647	>4	▲ 7	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/20/17	---	---

Customer Id: MMICHATN  
Sample No.: KCP28502  
Lab Number: 05631290  
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

### 15 Nov 2021 Diag: Angela Borella

#### VIS DEBRIS



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 05 Mar 2021 Diag: Angela Borella

#### VIS DEBRIS



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 01 Jul 2020 Diag: Angela Borella

#### NORMAL



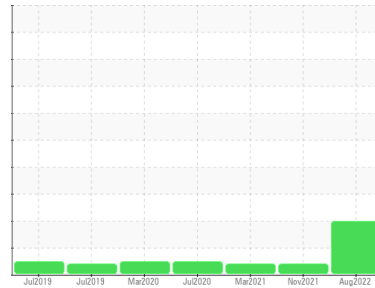
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable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

view report



Machine Id  
**KAESER BSD 60T 6421616 (S/N 1237)**

Component  
**Compressor**  
Fluid  
**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.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			<b>KCP28502</b>	KCP43977	KCP28190
Sample Date			<b>29 Aug 2022</b>	15 Nov 2021	05 Mar 2021
Machine Age	hrs		<b>14341</b>	10411	7469
Oil Age	hrs		<b>3930</b>	5943	3065
Oil Changed			<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >10	<b>0</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>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>13</b>	14	4
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>0</b>	0	10
Barium	ppm	ASTM D5185m 90	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 90	<b>14</b>	11	29
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	1
Zinc	ppm	ASTM D5185m	<b>18</b>	32	20
Sulfur	ppm	ASTM D5185m	<b>16266</b>	16246	14141

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m	<b>5</b>	6	8
Potassium	ppm	ASTM D5185m >20	<b>5</b>	2	5
Water	%	ASTM D6304 >0.05	<b>0.016</b>	0.016	0.012
ppm Water	ppm	ASTM D6304 >500	<b>161.6</b>	160.9	124.2

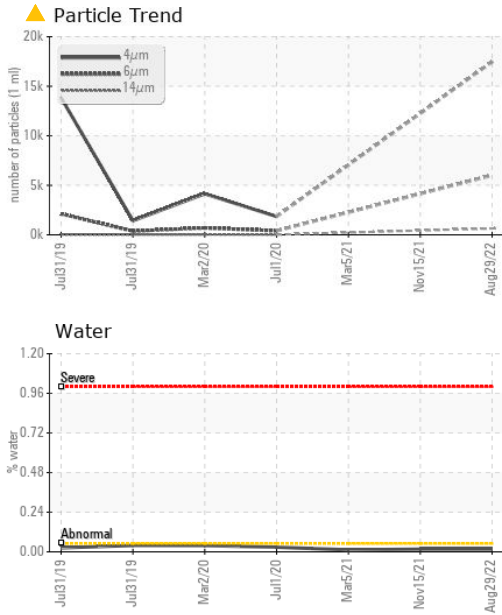
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>17462</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 6012</b>	---	---
Particles >14µm	ASTM D7647	>80	<b>▲ 641</b>	---	---
Particles >21µm	ASTM D7647	>20	<b>▲ 185</b>	---	---
Particles >38µm	ASTM D7647	>4	<b>▲ 7</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 21/20/17</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.32</b>	0.353	0.378

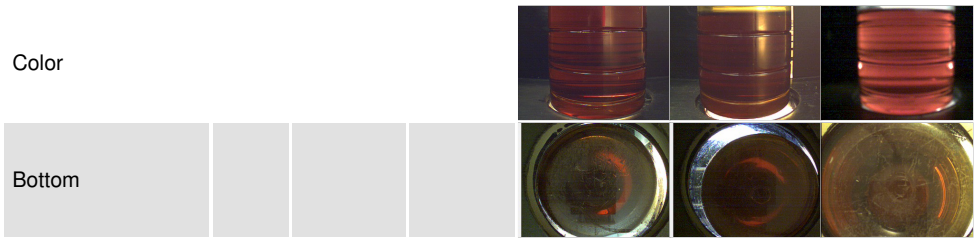
# OIL ANALYSIS REPORT



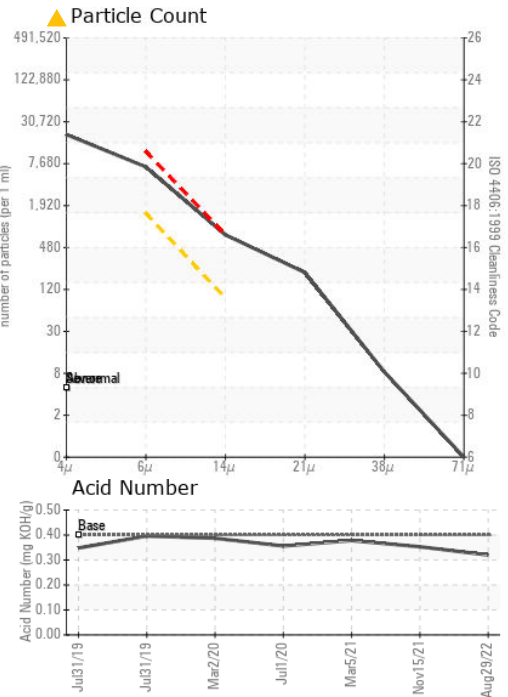
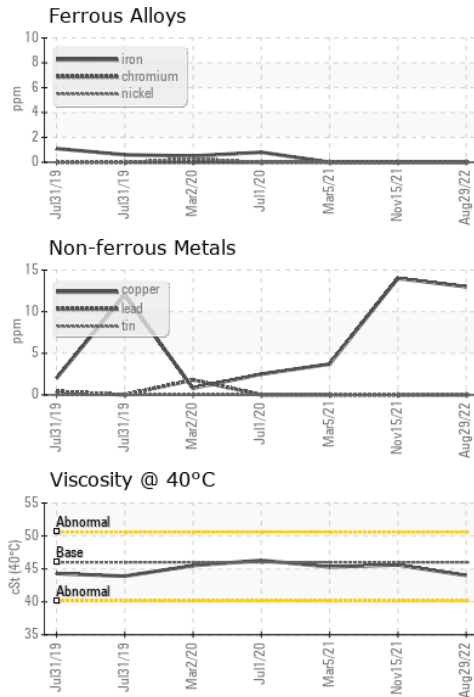
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	<b>▲ MODER</b>
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	<b>NEG</b>
Free Water	scalar	*Visual	<b>NEG</b>	<b>NEG</b>	<b>NEG</b>

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	<b>44.0</b>	45.6

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP28502 **Received** : 31 Aug 2022  
**Lab Number** : 05631290 **Diagnosed** : 01 Sep 2022  
**Unique Number** : 10115811 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**M & M INDUSTRIES INC**  
 1435 E 14TH ST  
 CHATTANOOGA, TN  
 USA 37404  
 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)