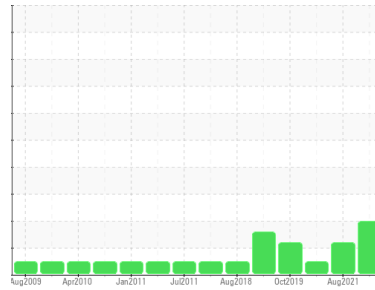




# PROBLEM SUMMARY

Sample Rating Trend



ISO



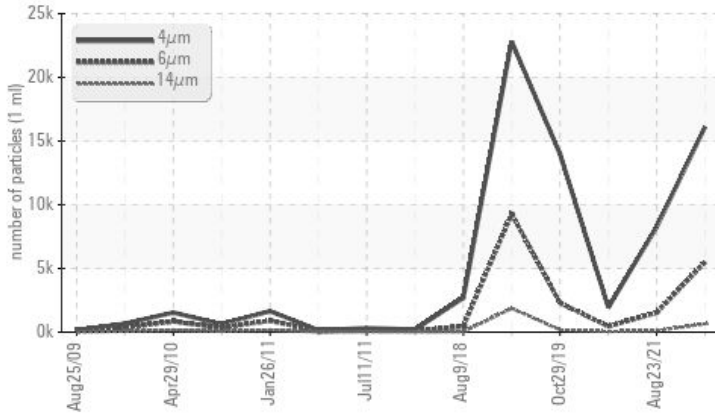
Machine Id  
**KAESER BSD 50 2724291 (S/N 1415)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 5506	▲ 1535	454
Particles >14µm	ASTM D7647	>80	▲ 642	▲ 108	47
Particles >21µm	ASTM D7647	>20	▲ 142	▲ 22	17
Particles >38µm	ASTM D7647	>4	▲ 6	0	3
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/20/17	▲ 18/14	16/13

Customer Id: AIRWAU  
Sample No.: KCP48330  
Lab Number: 05639132  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 23 Aug 2021 Diag: Jonathan Hester

ISO



No corrective action is recommended at this time. 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 moderate 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



### 08 Oct 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. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The condition of the oil is suitable for further service.

view report



### 29 Oct 2019 Diag: Don Baldrige

ISO



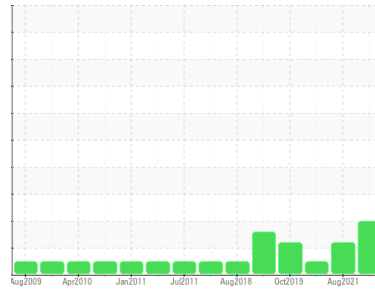
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER BSD 50 2724291 (S/N 1415)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Oil and 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	history1	history2
Sample Number	Client Info		<b>KCP48330</b>	KCP37799	KCP31341
Sample Date	Client Info		<b>31 Aug 2022</b>	23 Aug 2021	08 Oct 2020
Machine Age	hrs	Client Info	<b>49048</b>	46657	44486
Oil Age	hrs	Client Info	<b>3000</b>	3000	3000
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	<1	<1
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	<1	<1	<1
Aluminum	ppm	ASTM D5185m >10	1	0	0
Lead	ppm	ASTM D5185m >10	<1	0	2
Copper	ppm	ASTM D5185m >50	4	6	10
Tin	ppm	ASTM D5185m >10	<1	<1	0
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	<1	0
Barium	ppm	ASTM D5185m 90	3	<1	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m 90	43	24	0
Calcium	ppm	ASTM D5185m 2	<1	<1	0
Phosphorus	ppm	ASTM D5185m	11	1	0
Zinc	ppm	ASTM D5185m	10	0	0
Sulfur	ppm	ASTM D5185m	<b>18332</b>	17132	13512

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	8	3	0
Potassium	ppm	ASTM D5185m >20	2	<1	0
Water	%	ASTM D6304 >0.05	<b>0.023</b>	0.017	0.003
ppm Water	ppm	ASTM D6304 >500	<b>235.3</b>	175.6	37.8

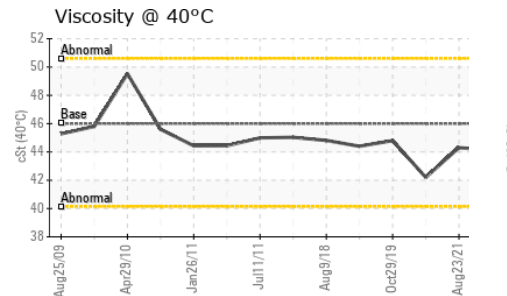
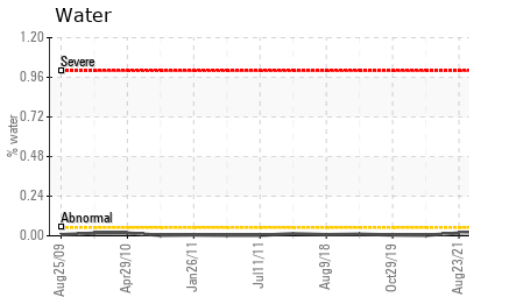
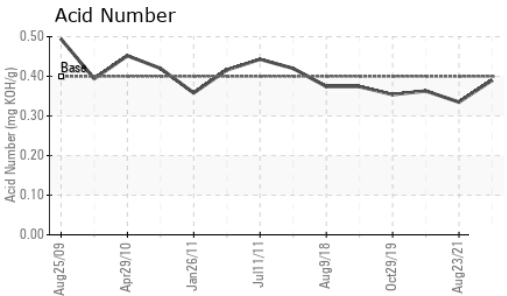
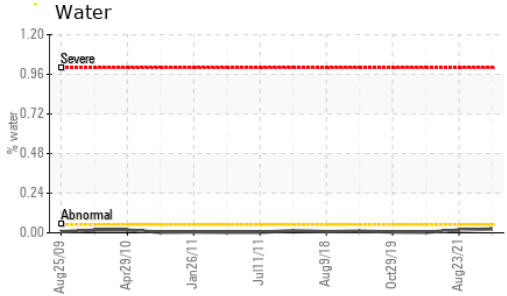
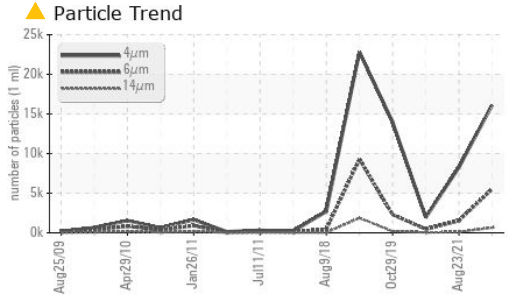
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>16107</b>	8258	1944
Particles >6µm	ASTM D7647 >1300		▲ <b>5506</b>	▲ 1535	454
Particles >14µm	ASTM D7647 >80		▲ <b>642</b>	▲ 108	47
Particles >21µm	ASTM D7647 >20		▲ <b>142</b>	▲ 22	17
Particles >38µm	ASTM D7647 >4		▲ <b>6</b>	0	3
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	2
Oil Cleanliness	ISO 4406 (c) >--/17/13		▲ <b>21/20/17</b>	▲ 18/14	16/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.39</b>	0.335	0.363

# OIL ANALYSIS REPORT



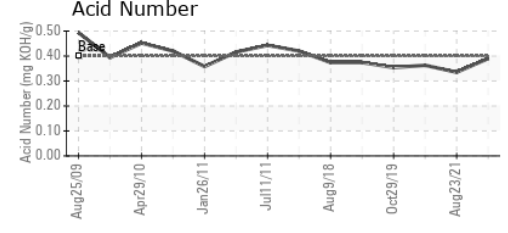
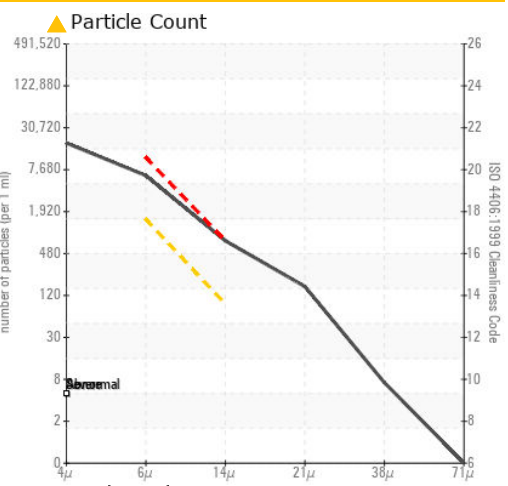
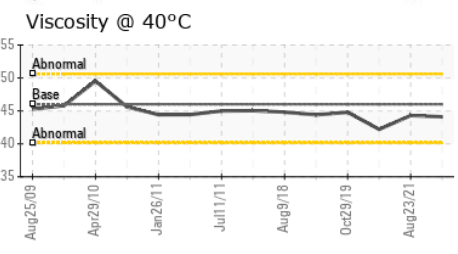
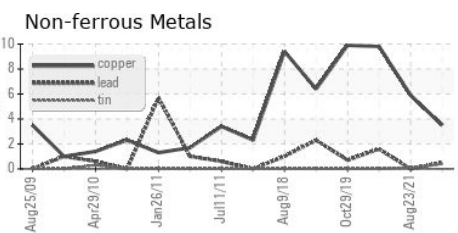
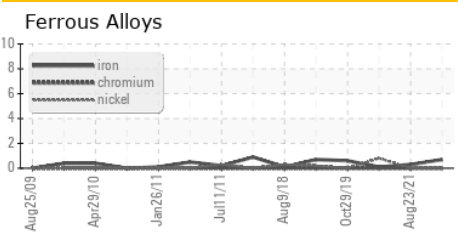
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.1	44.3	42.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP48330 **Received** : 12 Sep 2022  
**Lab Number** : 05639132 **Diagnosed** : 14 Sep 2022  
**Unique Number** : 10128662 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**AIRGAS INC**  
 401 SENTRY DR  
 WAUKESHA, WI  
 US 53186  
 Contact: KEITH FREDERICK  
 keith.frederick@airgas.com

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)