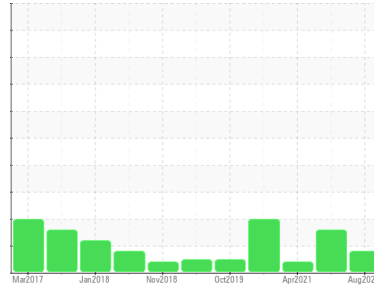


# PROBLEM SUMMARY

Sample Rating Trend



ISO



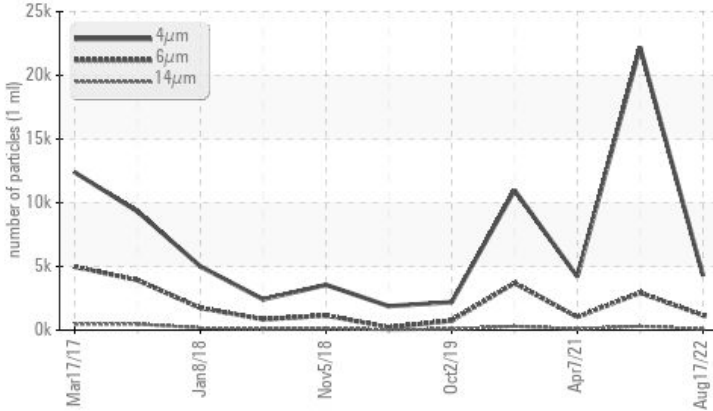
Machine Id  
**KAESER BSD 50T 5365460 (S/N 1178)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

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		ATTENTION	ABNORMAL	ATTENTION
Particles >14µm	ASTM D7647 >80	▲ 82	▲ 305	▲ 93
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 19/17/14	▲ 19/15	▲ 17/14

Customer Id: SHALOU  
Sample No.: KCP48118  
Lab Number: 05628973  
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

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

### 17 Dec 2021 Diag: Doug Bogart

ISO



Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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



### 07 Apr 2021 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 moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 03 Jun 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



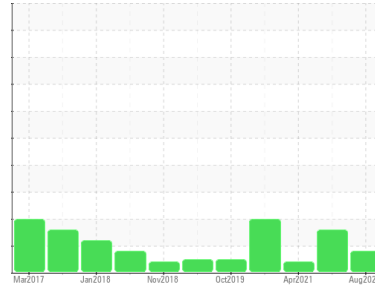
Machine Id  
**KAESER BSD 50T 5365460 (S/N 1178)**

Component

**Compressor**

Fluid

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



## DIAGNOSIS

### ▲ Recommendation

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 moderate 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>KCP48118</b>	KCP39595	KCP35964
Sample Date			<b>17 Aug 2022</b>	17 Dec 2021	07 Apr 2021
Machine Age	hrs		<b>50178</b>	44455	38518
Oil Age	hrs		<b>5724</b>	6000	7100
Oil Changed			<b>Changed</b>	Changed	Changed
Sample Status			<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<1	2	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	<1	<1	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	6	7	4
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	---	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	20	<1
Barium	ppm	ASTM D5185m 90	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 90	7	7	5
Calcium	ppm	ASTM D5185m 2	0	0	0
Phosphorus	ppm	ASTM D5185m	1	1	1
Zinc	ppm	ASTM D5185m	24	50	8
Sulfur	ppm	ASTM D5185m	<b>16273</b>	14533	15970

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	0	<1	<1
Sodium	ppm	ASTM D5185m	4	4	3
Potassium	ppm	ASTM D5185m >20	0	<1	<1
Water	%	ASTM D6304 >0.05	<b>0.008</b>	0.004	0.011
ppm Water	ppm	ASTM D6304 >500	<b>86.5</b>	47.7	112.1

## FLUID CLEANLINESS

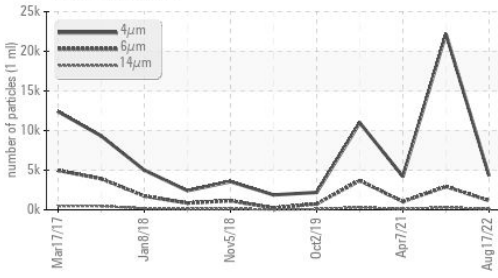
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>4290</b>	22185	4205
Particles >6µm	ASTM D7647	>1300	<b>1159</b>	▲ 2927	1027
Particles >14µm	ASTM D7647	>80	▲ <b>82</b>	▲ 305	▲ 93
Particles >21µm	ASTM D7647	>20	<b>19</b>	▲ 77	28
Particles >38µm	ASTM D7647	>4	<b>0</b>	▲ 6	2
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/17/14</b>	▲ 19/15	▲ 17/14

## FLUID DEGRADATION

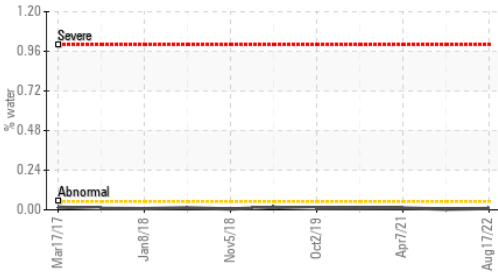
	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.41</b>	0.527	0.419

# OIL ANALYSIS REPORT

## ▲ Particle Trend



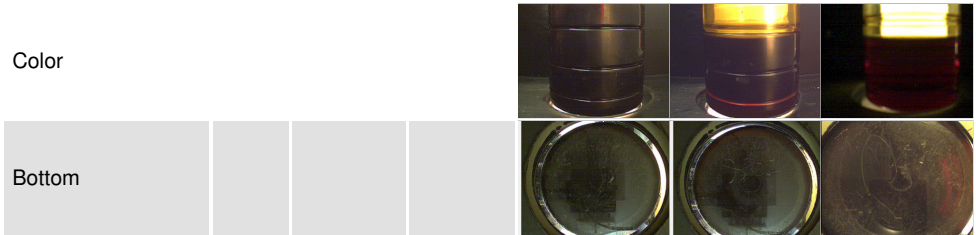
## Water



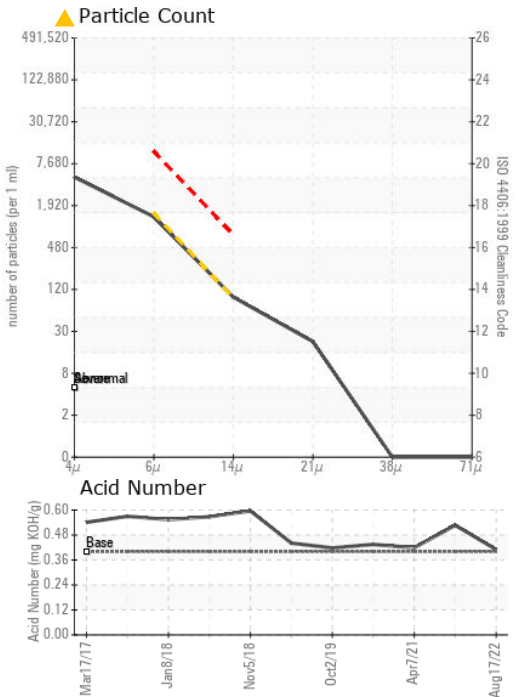
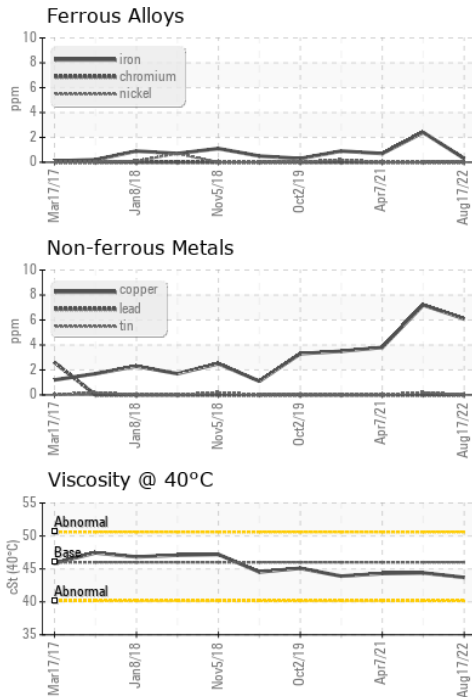
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	43.7	44.4	44.3

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP48118 **Received** : 29 Aug 2022  
**Lab Number** : 05628973 **Diagnosed** : 31 Aug 2022  
**Unique Number** : 10113494 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SHAPE MANUFACTURING CO**  
 1987 S PARK RD  
 LOUISVILLE, KY  
 USA 40219  
 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: