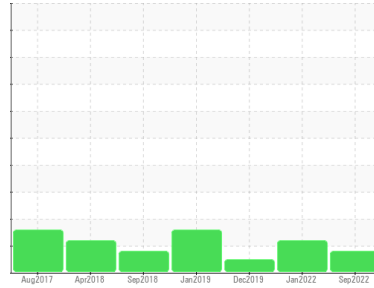


# PROBLEM SUMMARY

Sample Rating Trend



ISO



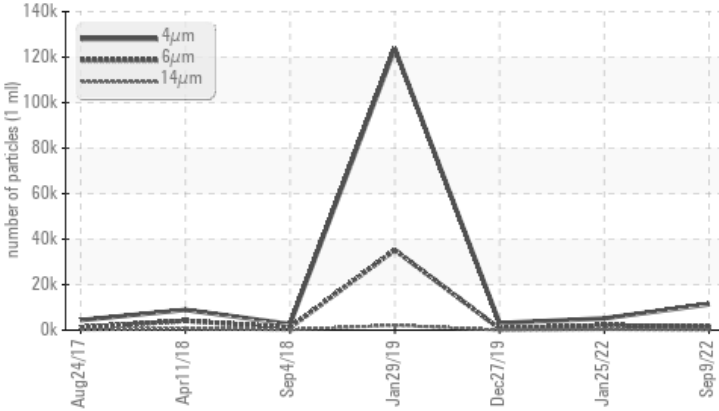
Machine Id  
**KAESER AS 25T 4899148 (S/N 1337)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-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		ATTENTION	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647 >1300	▲ 1454	▲ 2145	660
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/18/13	▲ 18/15	17/12

Customer Id: CARFREM D  
Sample No.: KCP46304  
Lab Number: 05645534  
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

### 25 Jan 2022 Diag: Angela Borella

ISO



We recommend you service the filters on this component. 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](#)



### 27 Dec 2019 Diag: Jonathan Hester

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 29 Jan 2019 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 condition of the oil is suitable for further service.

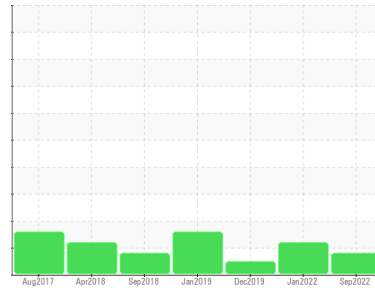
[view report](#)



Machine Id  
**KAESER AS 25T 4899148 (S/N 1337)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-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 moderate amount of silt (particulates < 14 microns in size) 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>KCP46304</b>	KCP05475781	KCP21824
Sample Date			<b>09 Sep 2022</b>	25 Jan 2022	27 Dec 2019
Machine Age	hrs		<b>36957</b>	36947	27642
Oil Age	hrs		<b>100</b>	9301	27642
Oil Changed			<b>Changed</b>	N/A	Changed
Sample Status			<b>ATTENTION</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<1	0	<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	0	0
Aluminum	ppm	ASTM D5185m >10	<1	0	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	3	17	2
Tin	ppm	ASTM D5185m >10	0	0	0
Antimony	ppm	ASTM D5185m	---	0	<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	0	<1	0
Barium	ppm	ASTM D5185m 90	52	0	11
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	66	0	40
Calcium	ppm	ASTM D5185m 0	<1	0	<1
Phosphorus	ppm	ASTM D5185m 0	7	7	<1
Zinc	ppm	ASTM D5185m 0	5	0	20
Sulfur	ppm	ASTM D5185m 23500	16791	14918	17955

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	0	2	<1
Sodium	ppm	ASTM D5185m	2	0	11
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	0.030	0.003	0.015
ppm Water	ppm	ASTM D6304 >500	306.3	25.9	153.8

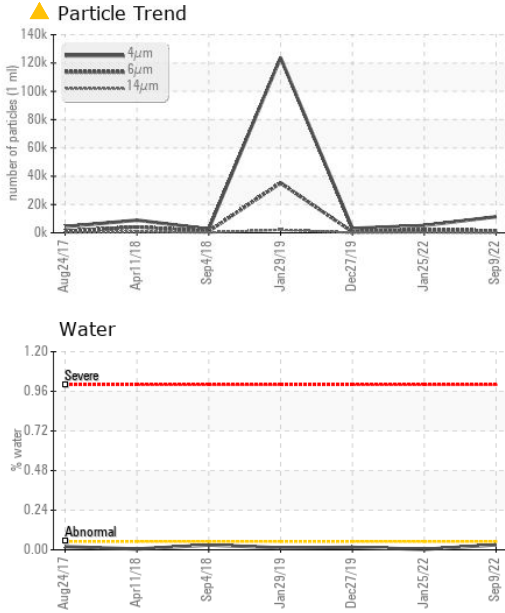
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		11351	5173	3113
Particles >6µm	ASTM D7647	>1300	▲ 1454	▲ 2145	660
Particles >14µm	ASTM D7647	>80	53	▲ 307	30
Particles >21µm	ASTM D7647	>20	13	▲ 62	8
Particles >38µm	ASTM D7647	>4	0	2	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/18/13	▲ 18/15	17/12

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.40	0.49	0.385

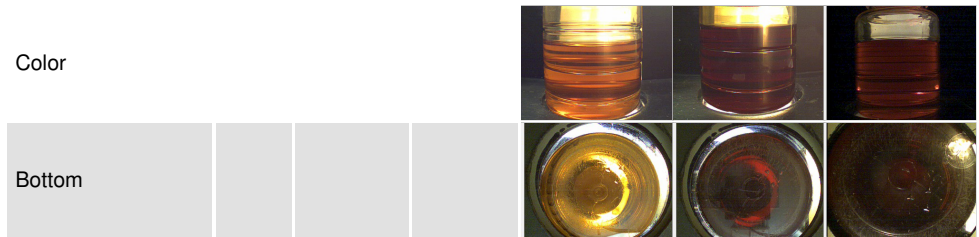
# OIL ANALYSIS REPORT



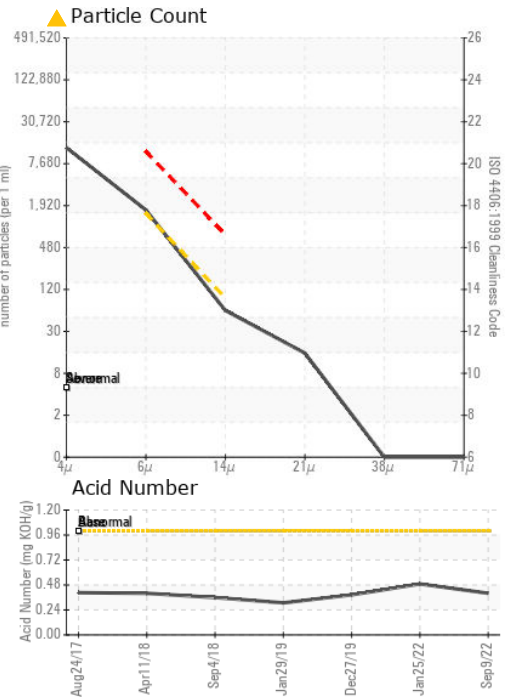
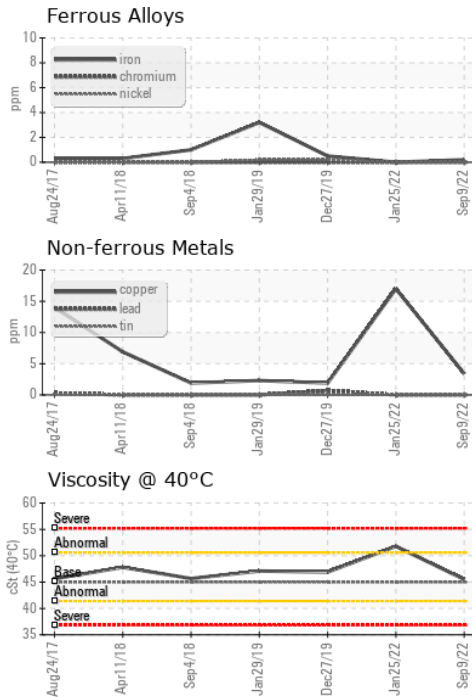
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 45	45.5	51.8	46.9

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.** : KCP46304 **Received** : 19 Sep 2022  
**Lab Number** : 05645534 **Diagnosed** : 21 Sep 2022  
**Unique Number** : 10140073 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CARMAX**  
 5601 URBANA PIKE  
 FREDERICK, MD  
 USA 21704  
 Contact:

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: