

## **PROBLEM SUMMARY**

Sample Rating Trend



Machine Id

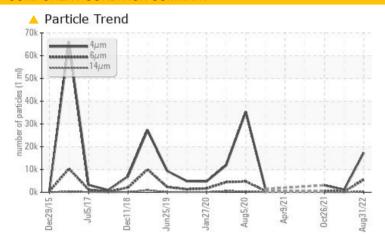
# KAESER ASD 40T 5213057 (S/N 1078)

Component

Compressor

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

## **COMPONENT CONDITION SUMMARY**



## RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status		ABNORMA	L NORMAL	NORMAL			
Particles >6µm	ASTM D7647 >	<b>1</b> 300 <b>△ 5497</b>	290	550			
Particles >14µm	ASTM D7647 >	<b>8</b> 0 <b>▲ 422</b>	39	38			
Particles >21µm	ASTM D7647 >	<b>≥</b> 20 <b>△ 136</b>	12	12			
Particles >38µm	ASTM D7647 >	<b>.</b> 4 <b>.△ 7</b>	3	0			
Oil Cleanliness	ISO 4406 (c) >	<b>1</b> 7/13 <b>△ 20/16</b>	15/12	16/12			

Customer Id: FIEEAS Sample No.: KC05637689 Lab Number: 05637689 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

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

## **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

## 09 May 2022 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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 26 Oct 2021 Diag: Don Baldridge

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.



### 19 Jul 2021 Diag: Doug Bogart

WATER



Oil change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. 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. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.





## **OIL ANALYSIS REPORT**

Sample Rating Trend



# KAESER ASD 40T 5213057 (S/N 1078)

Compressor

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

**DIAGNOSIS** 

## Recommendation

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.

## Contamination

There is a high amount of particulates present in the oil.

### **Fluid Condition**

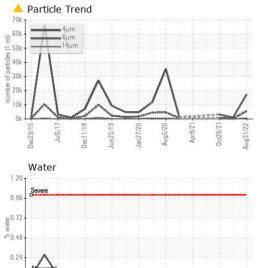
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

		)ec2015 Jul20	117 Dec2018 Jun2019	Jan 2020 Aug 2020 Apr 2021 Oct2	021 Aug202	
SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number				KC05637689	KC05543240	KC05391956
Sample Date				31 Aug 2022	09 May 2022	26 Oct 2021
Machine Age	hrs			0	25538	22523
Oil Age	hrs			0	4438	268
Oil Changed				N/A	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	7	10	6
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m				0
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	<1	19
Barium	ppm	ASTM D5185m	90	10	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	90	<1 36	2	32
•						
Magnesium	ppm	ASTM D5185m		36	2	32
Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m		36 0	2	32
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		36 0 0	2 0 8	32 0 0
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2	36 0 0 31	2 0 8 26	32 0 0 47
Magnesium Calcium Phosphorus Zinc CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 limit/base	36 0 0 31 current	2 0 8 26 history 1	32 0 0 47 history 2
Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 limit/base	36 0 0 31 current	2 0 8 26 history 1	32 0 0 47 history 2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >25 >20	36 0 0 31 current 0 6	2 0 8 26 history 1 0 <1	32 0 0 47 history 2 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	36 0 0 31 current 0 6	2 0 8 26 history 1 0 <1	32 0 0 47 history 2 0 7
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	2 limit/base >25 >20 >0.05	36 0 0 31 current 0 6 1 0.026	2 0 8 26 history 1 0 <1 0 0.007	32 0 0 47 history 2 0 7 2 0.017
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	2 limit/base >25 >20 >0.05 >500	36 0 0 31 current 0 6 1 0.026 262.0	2 0 8 26 history 1 0 <1 0 0.007 75.2	32 0 0 47 history 2 0 7 2 0.017 178.2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	limit/base   >25   >20   >0.05   >500   limit/base	36 0 0 31 current 0 6 1 0.026 262.0 current	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1	32 0 0 47 history 2 0 7 2 0.017 178.2 history 2
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	limit/base   >25   >20   >0.05   >500   limit/base	36 0 0 31 current 0 6 1 0.026 262.0 current 17378	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1	32 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method ASTM D7647 ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300	36 0 0 31 current 0 6 1 0.026 262.0 current 17378 ▲ 5497	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1 1035 290	32 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051 550
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80	36 0 0 31 current 0 6 1 0.026 262.0 current 17378 ▲ 5497 ▲ 422	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1 1035 290 39	32 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051 550 38
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	36 0 0 31 current 0 6 1 0.026 262.0 current 17378 ▲ 5497 ▲ 422 ▲ 136	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1 1035 290 39 12	32 0 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051 550 38 12
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304  Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	36 0 0 31 current 0 6 1 0.026 262.0 current 17378 ▲ 5497 ▲ 422 ▲ 136 ▲ 7	2 0 8 26 history 1 0 <1 0 0.007 75.2 history 1 1035 290 39 12 3	32 0 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051 550 38 12 0
Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304  Method ASTM D7647	2 limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3	36 0 0 31 current 0 6 1 0.026 262.0 current 17378 ▲ 5497 ▲ 422 ▲ 136 ▲ 7 0	2 0 8 26 history 1 0 0.007 75.2 history 1 1035 290 39 12 3	32 0 0 0 47 history 2 0 7 2 0.017 178.2 history 2 3051 550 38 12 0

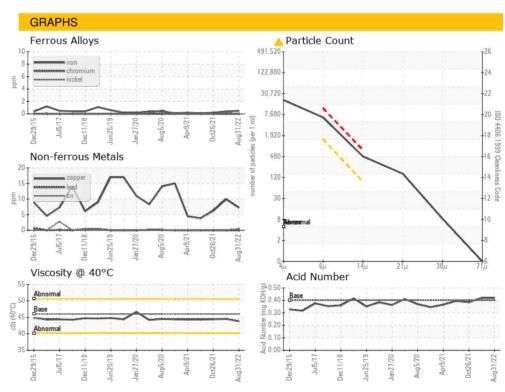


0.00

## **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	43.8	44.5	44.4
SAMPLE IMAGES	6	method	limit/base	current	history 1	history 2
Color						







Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10127219 Test Package : IND 2

: KC05637689 : 05637689

**Bottom** 

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Sep 2022 Diagnosed

: 14 Sep 2022 Diagnostician : Jonathan Hester

**FIELDALE** 270 FDC BY PRODUCT DR HWY 145 EASTANOLLEE, GA

USA 30538

Contact:

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)