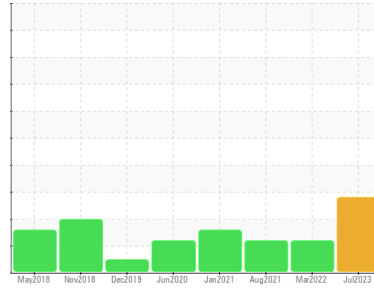




# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

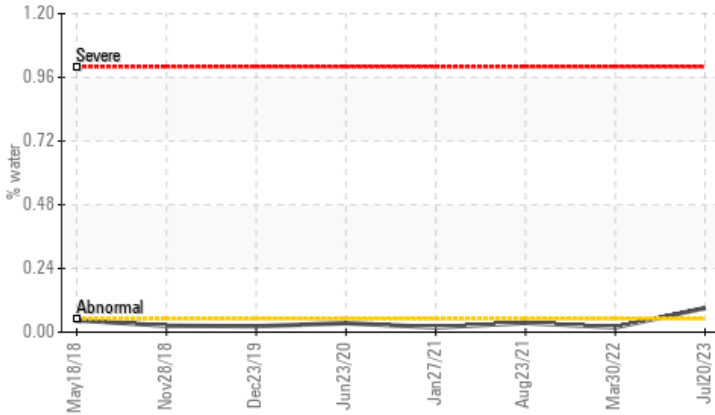


Machine Id  
**KAESER ASD 40 3801748 (S/N 1322)**

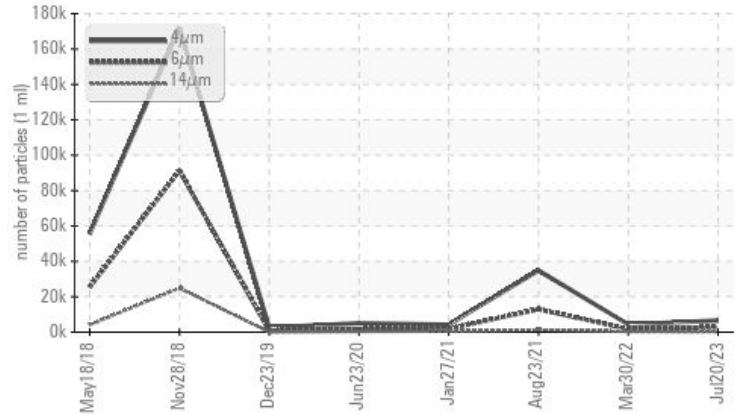
Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water



▲ Particle Trend



## RECOMMENDATION

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.05	▲ <b>0.091</b>	0.018	0.035
ppm Water	ppm	ASTM D6304	>500	▲ <b>911</b>	186.1	354.6
Particles >6µm		ASTM D7647	>1300	▲ <b>2818</b>	▲ 1715	▲ 12923
Particles >14µm		ASTM D7647	>80	▲ <b>150</b>	▲ 254	▲ 1334
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>20/19/14</b>	▲ 18/15	▲ 21/18
Emulsified Water	scalar	*Visual	>0.05	▲ <b>0.2%</b>	NEG	NEG

Customer Id: STALANPA  
 Sample No.: KCPA005583  
 Lab Number: 05931550  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 30 Mar 2022 Diag: Jonathan Hester

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



### 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 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 Jan 2021 Diag: Angela Borella

ISO



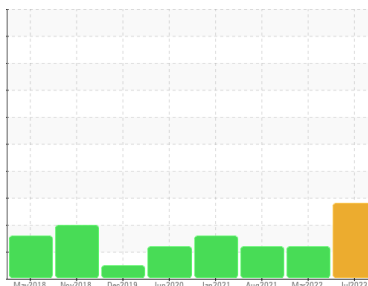
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.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

view report



Machine Id  
**KAESER ASD 40 3801748 (S/N 1322)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**



## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil. There is a light concentration of water 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>KCPA005583</b>	KCP45315	KCP42908	
Sample Date	Client Info	<b>20 Jul 2023</b>	30 Mar 2022	23 Aug 2021	
Machine Age	hrs	Client Info	<b>105328</b>	98116	93065
Oil Age	hrs	Client Info	<b>0</b>	5050	4636
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed	
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL	

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	<1
Chromium	ppm	ASTM D5185m >10	0	0
Nickel	ppm	ASTM D5185m >3	0	0
Titanium	ppm	ASTM D5185m >3	0	0
Silver	ppm	ASTM D5185m >2	0	<1
Aluminum	ppm	ASTM D5185m >10	0	<1
Lead	ppm	ASTM D5185m >10	0	0
Copper	ppm	ASTM D5185m >50	7	13
Tin	ppm	ASTM D5185m >10	<1	<1
Antimony	ppm	ASTM D5185m	---	---
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	2
Barium	ppm	ASTM D5185m 90	11	31
Molybdenum	ppm	ASTM D5185m 0	0	0
Manganese	ppm	ASTM D5185m	<1	0
Magnesium	ppm	ASTM D5185m 100	68	94
Calcium	ppm	ASTM D5185m 0	5	17
Phosphorus	ppm	ASTM D5185m 0	3	4
Zinc	ppm	ASTM D5185m 0	25	39
Sulfur	ppm	ASTM D5185m 23500	21555	17622

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	1	<1
Sodium	ppm	ASTM D5185m	25	69
Potassium	ppm	ASTM D5185m >20	2	6
Water	%	ASTM D6304 >0.05	0.018	0.035
ppm Water	ppm	ASTM D6304 >500	911	186.1

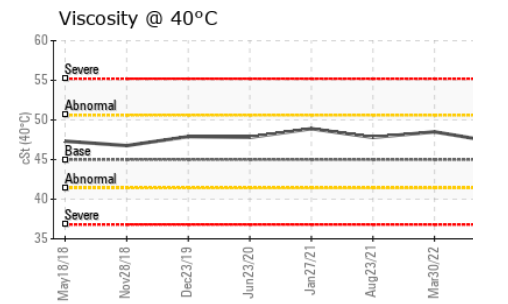
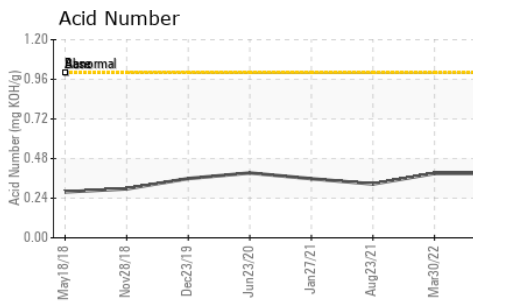
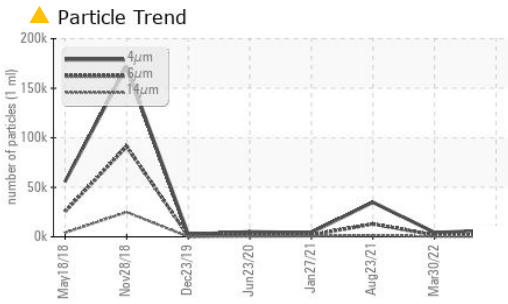
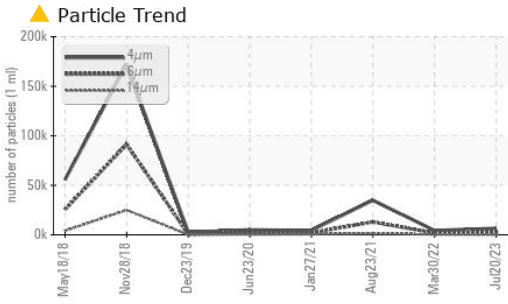
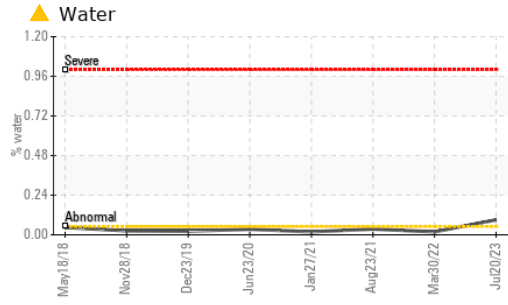
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	6595	4342	34900
Particles >6µm	ASTM D7647 >1300	2818	1715	12923
Particles >14µm	ASTM D7647 >80	150	254	1334
Particles >21µm	ASTM D7647 >20	16	27	61
Particles >38µm	ASTM D7647 >4	0	0	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	20/19/14	18/15	21/18

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.39	0.39
			0.39	0.326

# OIL ANALYSIS REPORT

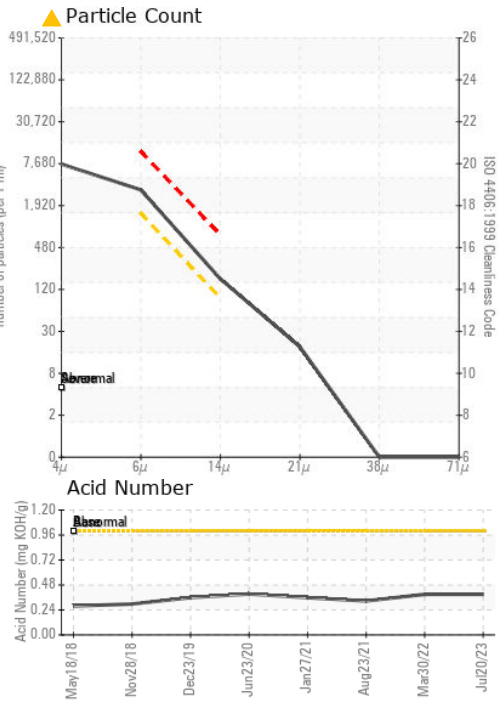
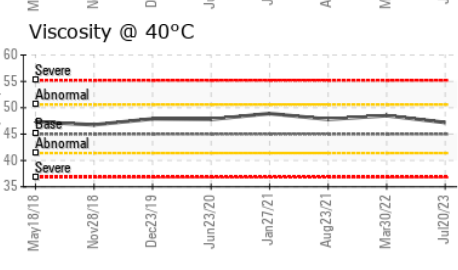
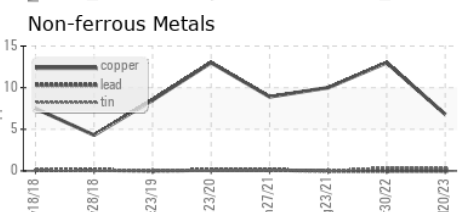
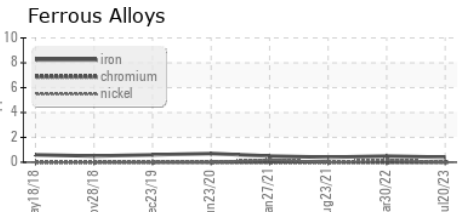


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual	0.2%	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	47.2	48.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA005583 **Received** : 22 Aug 2023  
**Lab Number** : 05931550 **Diagnosed** : 25 Aug 2023  
**Unique Number** : 10616821 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**STANDARD OFFSET**  
 500 E OREGON RD  
 LANCASTER, PA  
 US 17543  
 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: