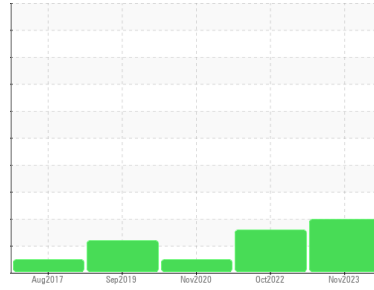




# PROBLEM SUMMARY

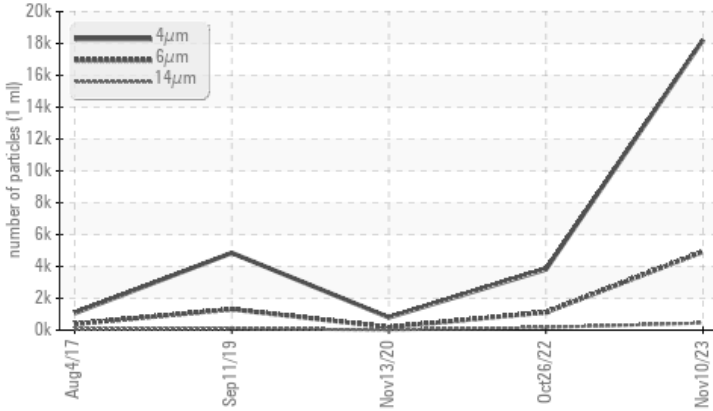
Sample Rating Trend



Machine Id  
**KAESER AS 25T 4795170 (S/N 1270)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## 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			ABNORMAL	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 4927	1124	186
Particles >14µm	ASTM D7647	>80	▲ 449	▲ 168	16
Particles >21µm	ASTM D7647	>20	▲ 125	▲ 71	6
Particles >38µm	ASTM D7647	>4	▲ 8	▲ 4	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/16	▲ 19/17/15	15/11

Customer Id: MARSANTX  
 Sample No.: KCPA007060  
 Lab Number: 06016412  
 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

### 26 Oct 2022 Diag: Don Baldrige

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



### 13 Nov 2020 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



### 11 Sep 2019 Diag: Angela Borella

ISO



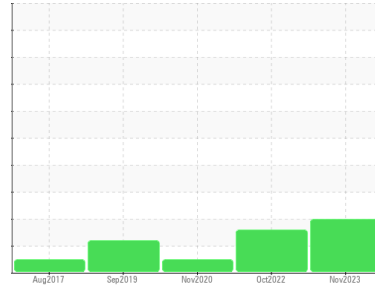
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid.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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER AS 25T 4795170 (S/N 1270)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

The 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>KCPA007060</b>	KCP47816D	KCP29584
Sample Date	Client Info		<b>10 Nov 2023</b>	26 Oct 2022	13 Nov 2020
Machine Age	hrs	Client Info	<b>41712</b>	38110	30635
Oil Age	hrs	Client Info	<b>0</b>	3000	3000
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>67</b>	8	1
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	0	1
Zinc	ppm	ASTM D5185m 0	<b>14</b>	15	9
Sulfur	ppm	ASTM D5185m 23500	<b>22023</b>	19277	16352

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>8</b>	3	0
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	0
Water	%	ASTM D6304 >0.05	<b>0.032</b>	0.010	0.009
ppm Water	ppm	ASTM D6304 >500	<b>322</b>	107.7	90.2

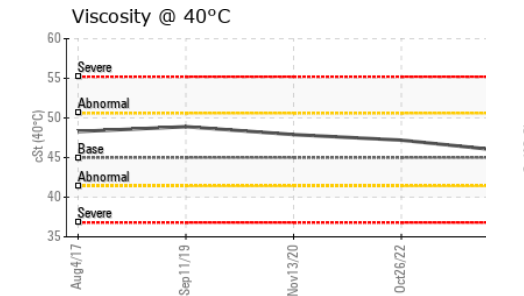
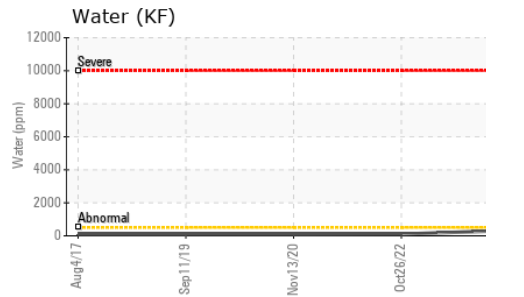
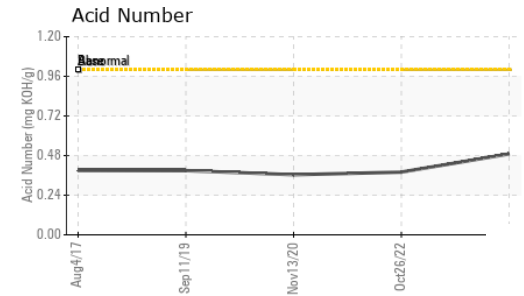
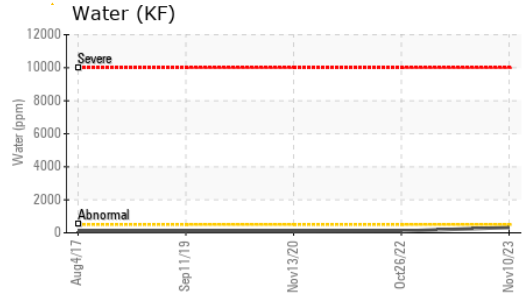
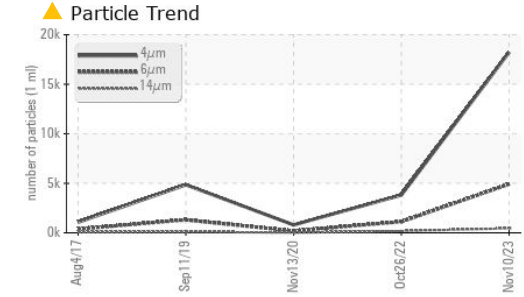
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>18226</b>	3814	799
Particles >6µm	ASTM D7647	>1300	<b>▲ 4927</b>	1124	186
Particles >14µm	ASTM D7647	>80	<b>▲ 449</b>	▲ 168	16
Particles >21µm	ASTM D7647	>20	<b>▲ 125</b>	▲ 71	6
Particles >38µm	ASTM D7647	>4	<b>▲ 8</b>	▲ 4	0
Particles >71µm	ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 21/19/16</b>	▲ 19/17/15	15/11

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.49</b>	0.38	0.364

# OIL ANALYSIS REPORT

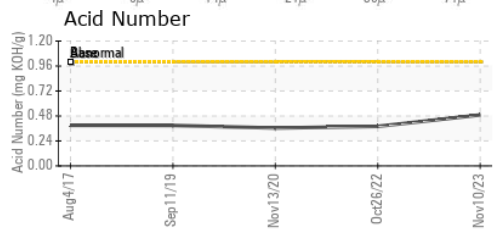
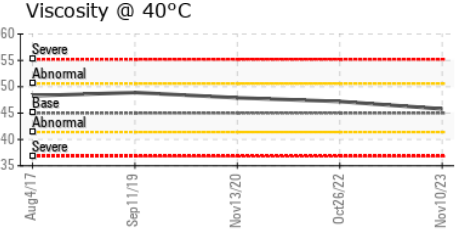
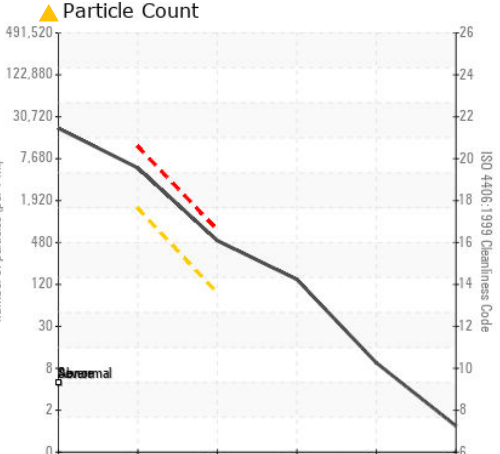
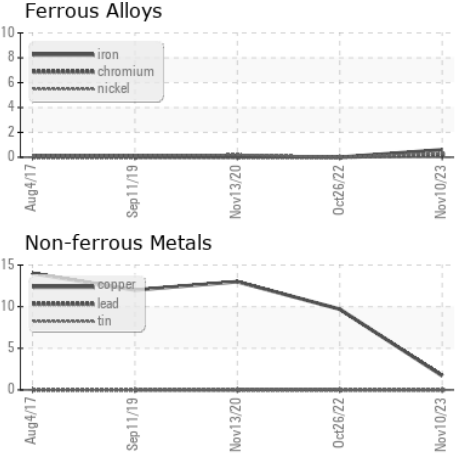


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	45.8	47.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA007060 **Received** : 24 Nov 2023  
**Lab Number** : 06016412 **Diagnosed** : 28 Nov 2023  
**Unique Number** : 10755556 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**MARSHALL PRECISION MACHINING**  
 403 ACKER ST  
 SANGER, TX  
 US 76266  
 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)