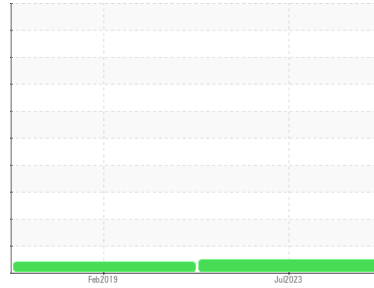




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER AS 20T 5714185 (S/N 1159)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCP48196D</b>	KCP11129	---
Sample Date	Client Info		<b>25 Jul 2023</b>	09 Feb 2019	---
Machine Age	hrs	Client Info	<b>10753</b>	2729	---
Oil Age	hrs	Client Info	<b>1000</b>	2729	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ATTENTION	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	1	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>21</b>	7	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m 100	<b>10</b>	40	---
Calcium	ppm	ASTM D5185m 0	<b>2</b>	<1	---
Phosphorus	ppm	ASTM D5185m 0	<b>10</b>	1	---
Zinc	ppm	ASTM D5185m 0	<b>49</b>	11	---
Sulfur	ppm	ASTM D5185m 23500	<b>22531</b>	17114	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>2</b>	14	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	<1	---
Water	%	ASTM D6304 >0.05	<b>0.008</b>	0.011	---
ppm Water	ppm	ASTM D6304 >500	<b>86.7</b>	110	---

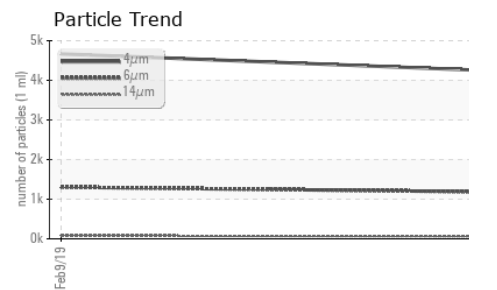
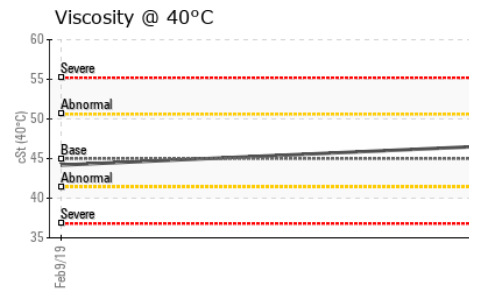
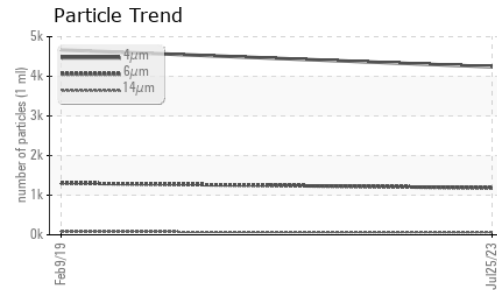
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>4241</b>	4667	---
Particles >6µm	ASTM D7647	>1300	<b>1183</b>	▲ 1305	---
Particles >14µm	ASTM D7647	>80	<b>67</b>	76	---
Particles >21µm	ASTM D7647	>20	<b>16</b>	21	---
Particles >38µm	ASTM D7647	>4	<b>1</b>	2	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	▲ 18/13	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.41</b>	0.322	---

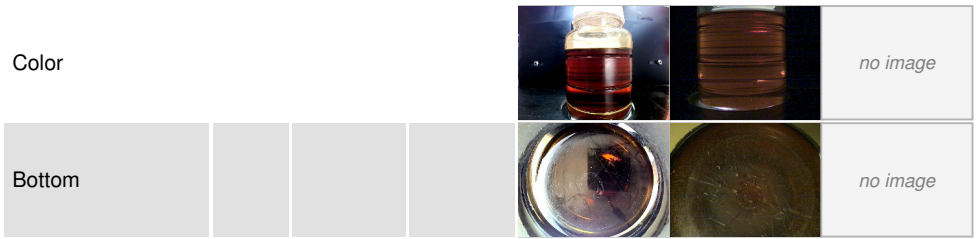
# OIL ANALYSIS REPORT



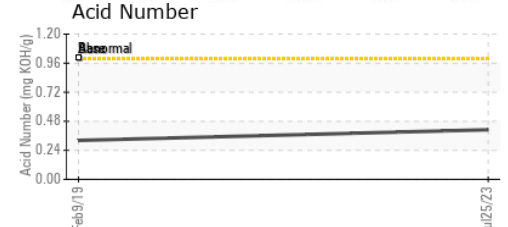
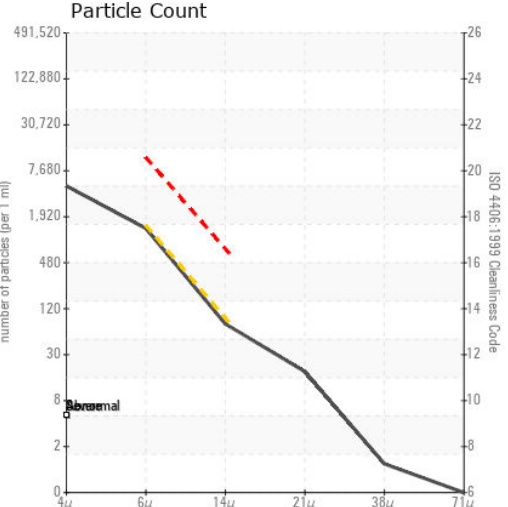
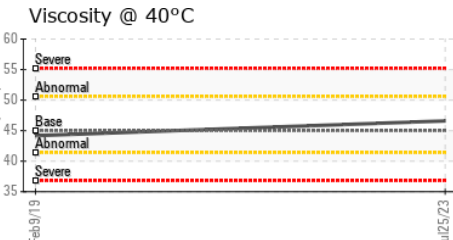
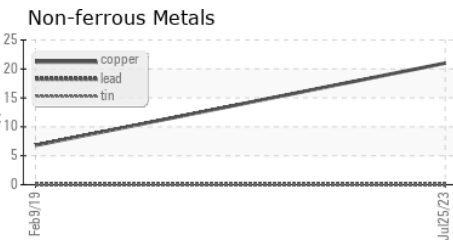
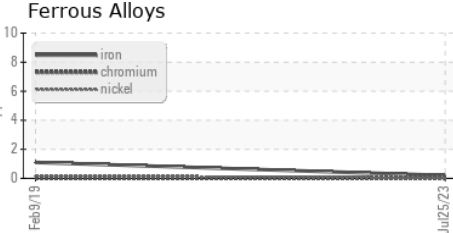
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46.6	44.18

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP48196D **Received** : 17 Aug 2023  
**Lab Number** : 05927840 **Diagnosed** : 21 Aug 2023  
**Unique Number** : 10607787 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CARMAX 06011**  
 531 ROUTE 38 W  
 MAPLE SHADE, NJ  
 US 08057  
 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)