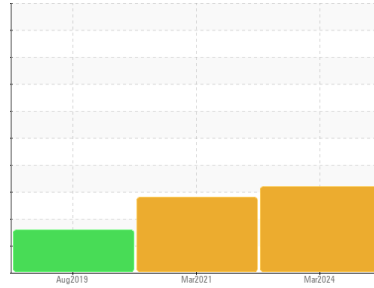




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**KAESER ASD 25 2208713 (S/N 1062)**

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

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate 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>KCPA013486</b>	KCP11117	KCP22565
Sample Date	Client Info			<b>06 Mar 2024</b>	23 Mar 2021	15 Aug 2019
Machine Age	hrs	Client Info		<b>7062</b>	1780	29721
Oil Age	hrs	Client Info		<b>2000</b>	3000	3000
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	7	19
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

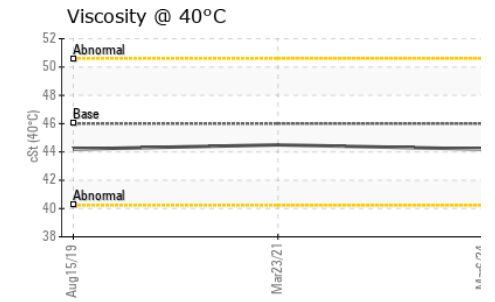
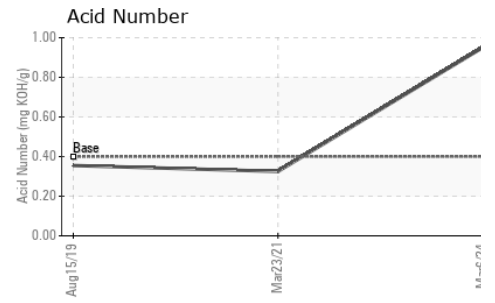
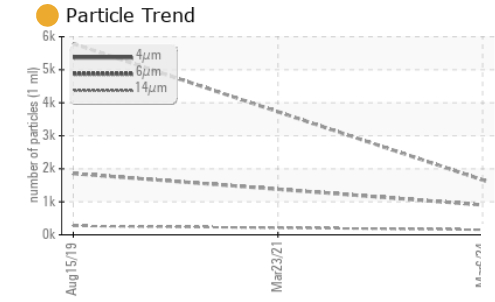
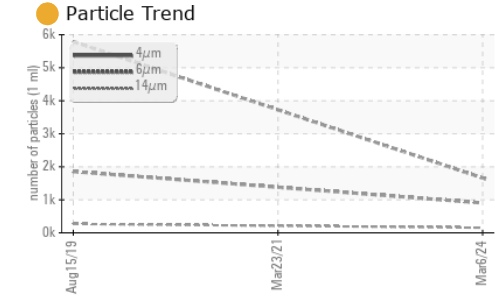
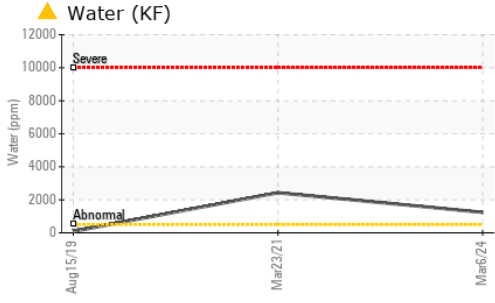
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	90	<b>43</b>	26	0
Calcium	ppm	ASTM D5185m	2	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>1</b>	2	1
Zinc	ppm	ASTM D5185m		<b>2</b>	<1	2
Sulfur	ppm	ASTM D5185m		<b>20934</b>	16042	14753

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m		<b>16</b>	5	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Water	%	ASTM D6304	>0.05	<b>▲ 0.124</b>	▲ 0.243	0.008
ppm Water	ppm	ASTM D6304	>500	<b>▲ 1240</b>	▲ 2430	88.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>1662</b>	---	5790
Particles >6µm		ASTM D7647	>1300	<b>905</b>	---	● 1856
Particles >14µm		ASTM D7647	>80	● <b>154</b>	---	▲ 269
Particles >21µm		ASTM D7647	>20	● <b>52</b>	---	▲ 89
Particles >38µm		ASTM D7647	>4	● <b>8</b>	---	● 7
Particles >71µm		ASTM D7647	>3	<b>1</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● <b>18/17/14</b>	---	▲ 18/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.95</b>	0.325	0.355

# OIL ANALYSIS REPORT

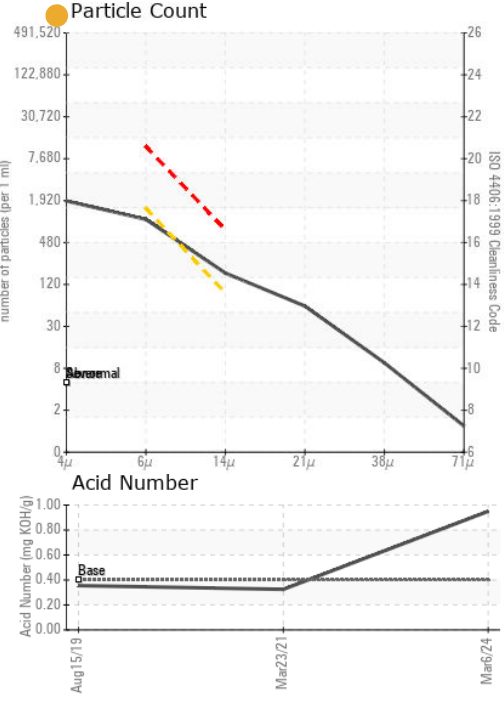
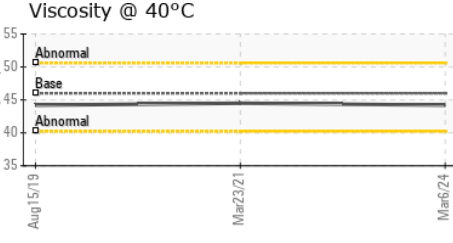
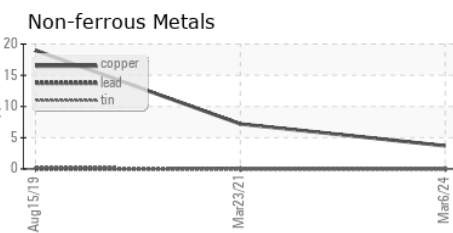
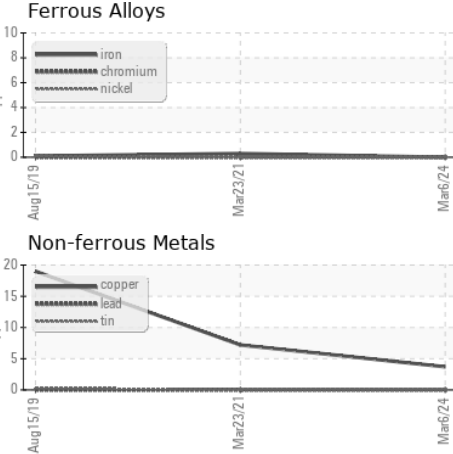


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	<b>44.2</b>	44.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA013486 **Received** : 21 Mar 2024  
**Lab Number** : 06125691 **Tested** : 27 Mar 2024  
**Unique Number** : 10939842 **Diagnosed** : 27 Mar 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CARVER BATH & TUB**  
 3303 MAIN ST  
 GRANDVIEW, MO  
 US 64030  
 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)