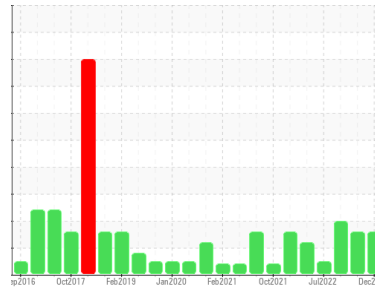


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER ESD 300 2551822 (S/N 1044)**

Component  
**Compressor**

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

**DIAGNOSIS**

▲ **Recommendation**

No corrective action is recommended at this time. 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>KCPA010118</b>	KCPA006099	KCP46517D
Sample Date	Client Info		<b>20 Dec 2023</b>	21 Sep 2023	14 Oct 2022
Machine Age	hrs	Client Info	<b>105835</b>	104889	98541
Oil Age	hrs	Client Info	<b>0</b>	0	2353
Oil Changed	Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
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>	<1	2
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>4</b>	4	3
Tin	ppm	ASTM D5185m >10	<b>&lt;1</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>&lt;1</b>	4	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>12</b>	0	43
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>4</b>	0	5
Zinc	ppm	ASTM D5185m	<b>0</b>	0	5
Sulfur	ppm	ASTM D5185m	<b>16681</b>	18427	20577

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>10</b>	<1	6
Potassium	ppm	ASTM D5185m >20	<b>3</b>	1	6
Water	%	ASTM D6304 >0.05	<b>0.010</b>	0.015	0.021
ppm Water	ppm	ASTM D6304 >500	<b>109</b>	159.2	218.2

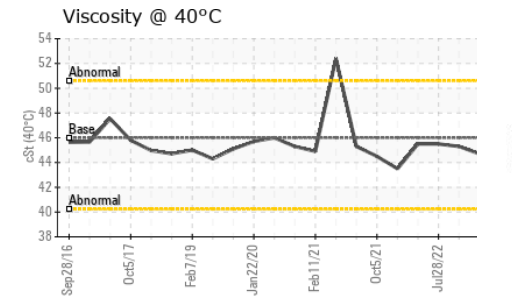
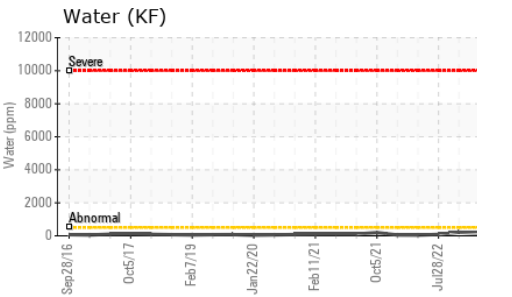
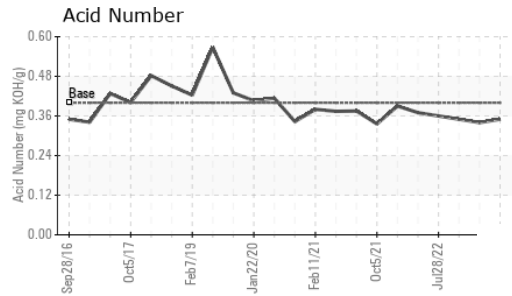
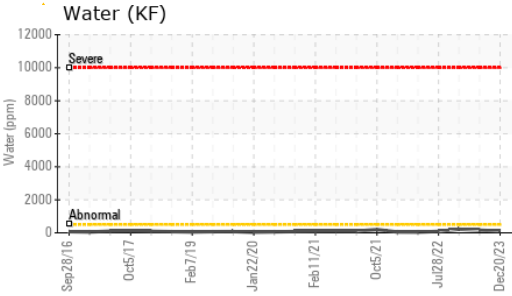
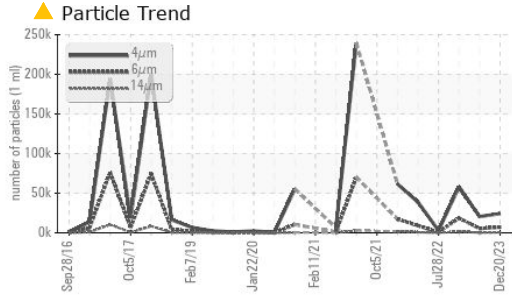
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>24193</b>	20465	57991
Particles >6µm	ASTM D7647	>1300	▲ <b>7292</b>	▲ 5297	▲ 18638
Particles >14µm	ASTM D7647	>80	▲ <b>391</b>	▲ 208	▲ 1526
Particles >21µm	ASTM D7647	>20	▲ <b>78</b>	▲ 47	▲ 192
Particles >38µm	ASTM D7647	>4	<b>2</b>	2	▲ 6
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>22/20/16</b>	▲ 22/20/15	▲ 23/21/18

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.35</b>	0.34	0.35

# OIL ANALYSIS REPORT

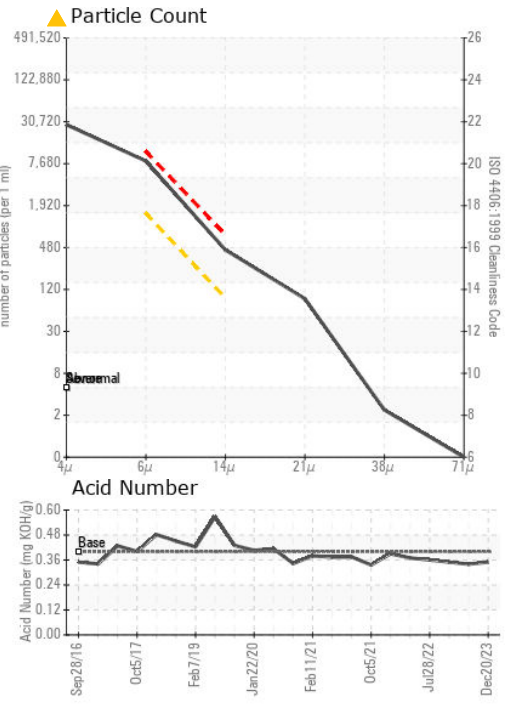
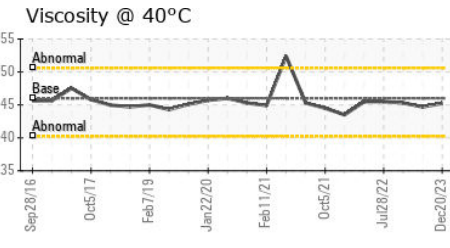
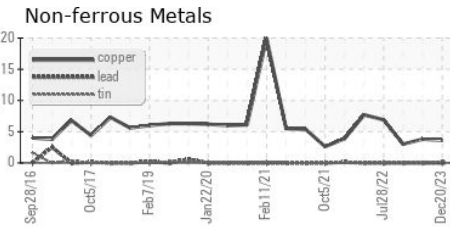
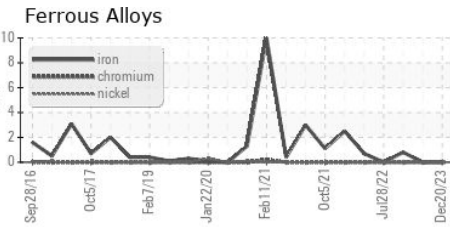


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	45.24	44.7	45.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010118 **Received** : 10 Jan 2024  
**Lab Number** : 06056706 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10822655 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**GERDAU MAC STEEL**  
 3000 E FRONT ST  
 MONROE, MI  
 US 48161  
 Contact:

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)