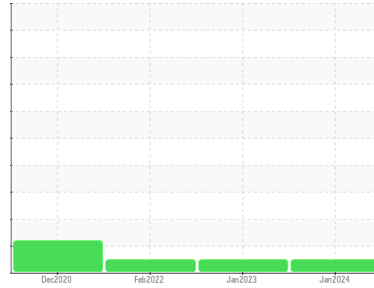




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**7209927 (S/N 1244)**

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>KCPA011657</b>	KCP55792	KCP41217
Sample Date	Client Info			<b>08 Jan 2024</b>	24 Jan 2023	17 Feb 2022
Machine Age	hrs	Client Info		<b>9284</b>	6212	4268
Oil Age	hrs	Client Info		<b>0</b>	1946	895
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>2</b>	1	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>13</b>	2	5
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

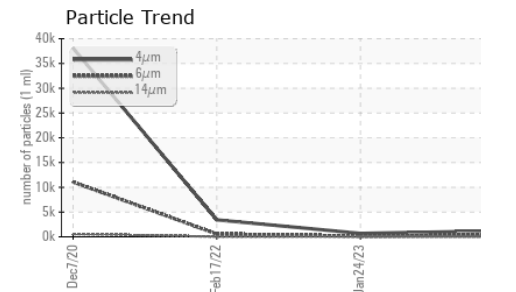
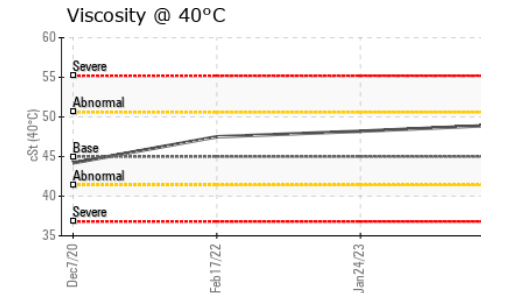
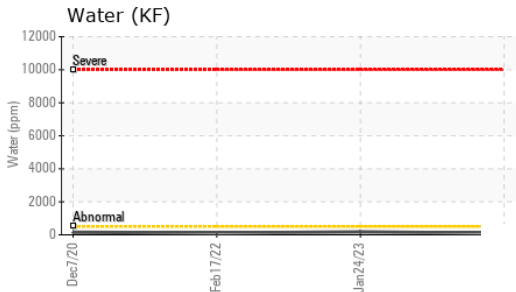
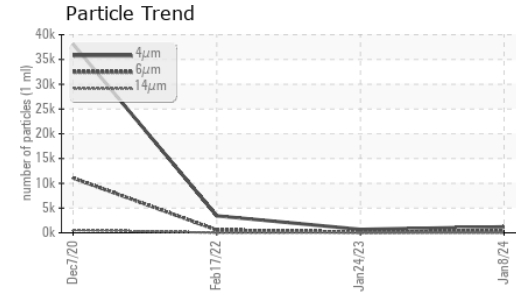
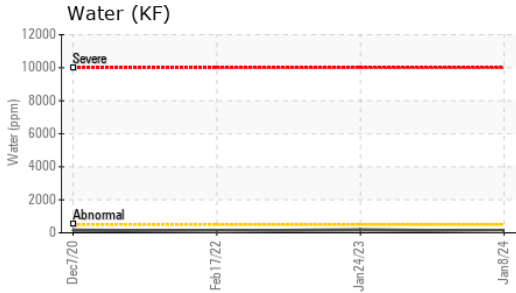
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	90	<b>0</b>	30	18
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>38</b>	72	51
Calcium	ppm	ASTM D5185m	0	<b>0</b>	2	2
Phosphorus	ppm	ASTM D5185m	0	<b>31</b>	30	5
Zinc	ppm	ASTM D5185m	0	<b>0</b>	9	6
Sulfur	ppm	ASTM D5185m	23500	<b>18990</b>	23259	16262

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	2	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	22	14
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	2
Water	%	ASTM D6304	>0.05	<b>0.009</b>	0.017	0.011
ppm Water	ppm	ASTM D6304	>500	<b>95</b>	178.8	110.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>1214</b>	691	3430
Particles >6µm		ASTM D7647	>1300	<b>359</b>	125	559
Particles >14µm		ASTM D7647	>80	<b>17</b>	17	15
Particles >21µm		ASTM D7647	>20	<b>4</b>	9	2
Particles >38µm		ASTM D7647	>4	<b>0</b>	4	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	3	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>17/16/11</b>	17/14/11	16/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.40</b>	0.38	0.39

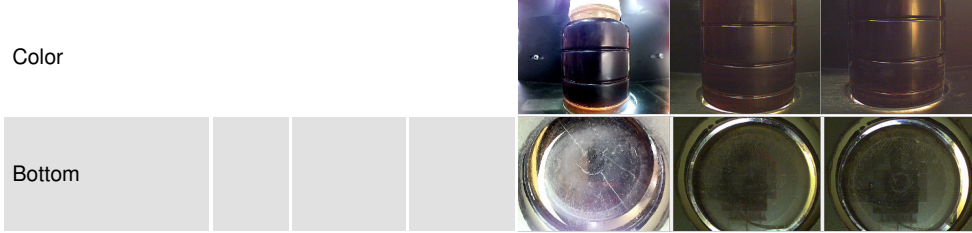
# OIL ANALYSIS REPORT



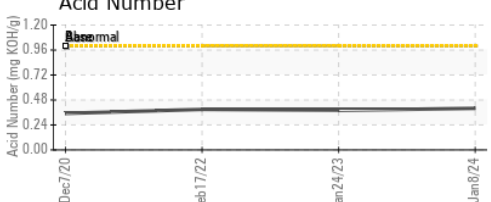
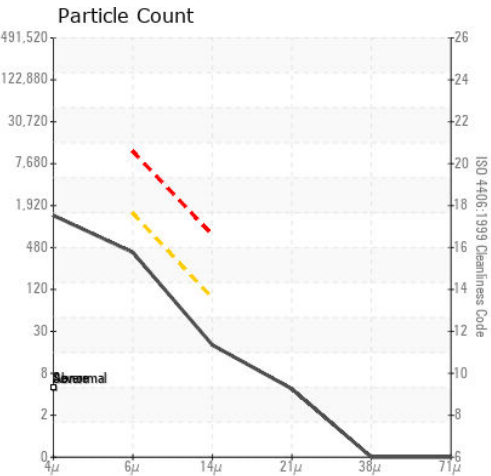
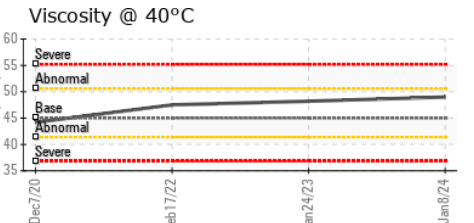
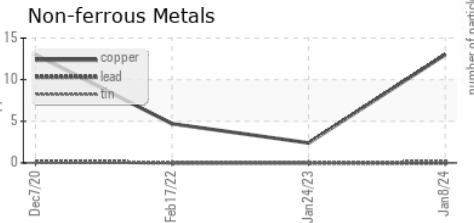
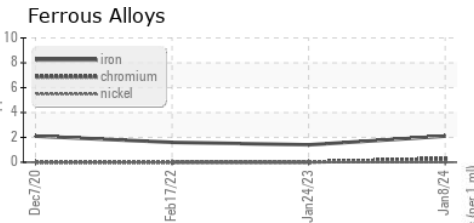
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 45	49.0	48.2	47.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA011657 **Received** : 16 Jan 2024  
**Lab Number** : 06061967 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833349 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SUPERIOR MANUFACTURING**  
 5069 168TH AVE SE  
 KINDRED, ND  
 US 58051  
 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: