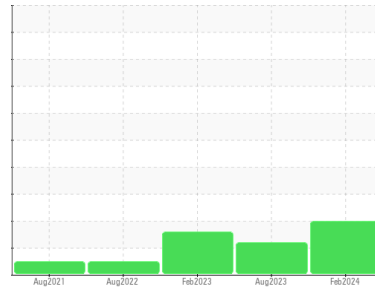


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**7402412 (S/N 1582)**

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>KCP121713</b>	KC100280	KC105997
Sample Date	Client Info	<b>01 Feb 2024</b>	01 Aug 2023	13 Feb 2023
Machine Age	hrs	<b>9407</b>	7461	6091
Oil Age	hrs	<b>0</b>	0	1335
Oil Changed	Client Info	<b>N/A</b>	N/A	Not Changd
Sample Status		<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	0	0
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	1	<1
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>11</b>	7	5
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</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>13</b>	0	15
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>24</b>	5	46
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>0</b>	12	0
Zinc	ppm	ASTM D5185m	<b>10</b>	0	6
Sulfur	ppm	ASTM D5185m	<b>18390</b>	18813	21170

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>9</b>	3	16
Potassium	ppm	ASTM D5185m >20	<b>5</b>	<1	6
Water	%	ASTM D6304 >0.05	<b>0.010</b>	0.005	0.013
ppm Water	ppm	ASTM D6304 >500	<b>109</b>	59	136.6

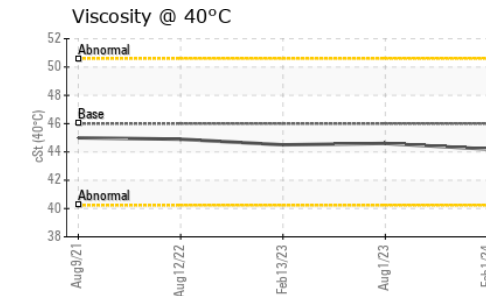
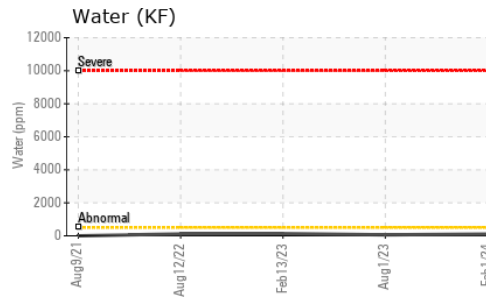
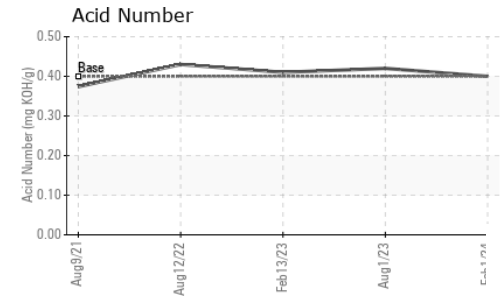
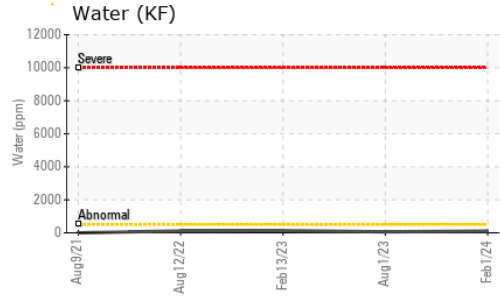
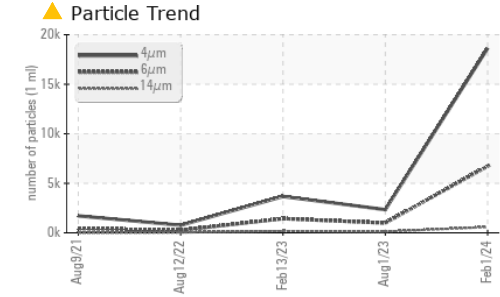
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>18633</b>	2338	3672
Particles >6µm	ASTM D7647 >1300	<b>▲ 6725</b>	991	▲ 1433
Particles >14µm	ASTM D7647 >80	<b>▲ 582</b>	▲ 116	▲ 178
Particles >21µm	ASTM D7647 >20	<b>▲ 145</b>	▲ 31	▲ 30
Particles >38µm	ASTM D7647 >4	<b>▲ 5</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 21/20/16</b>	▲ 18/17/14	▲ 19/18/15

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.40</b>	0.42	0.41

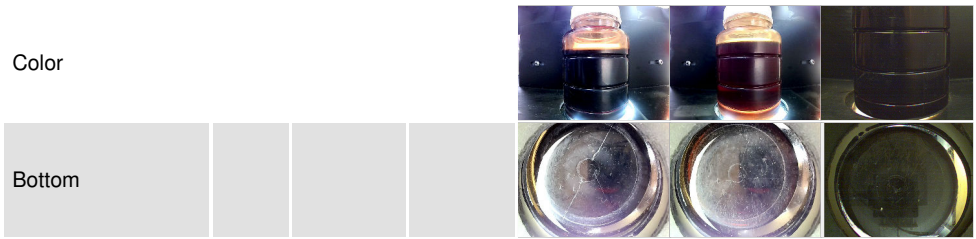
# OIL ANALYSIS REPORT



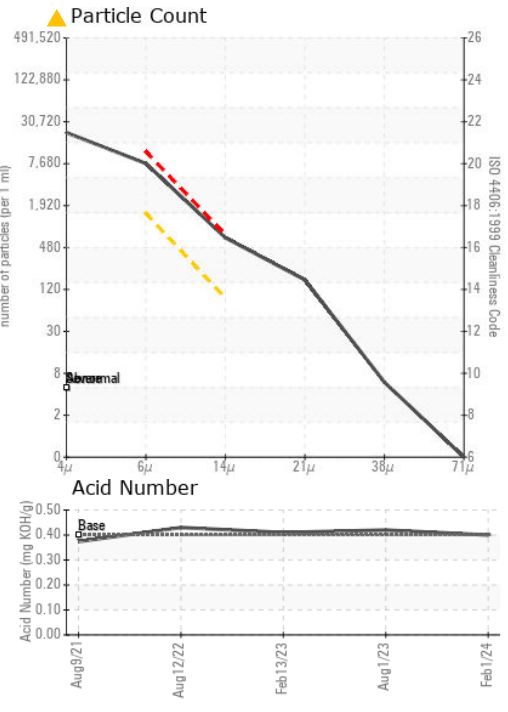
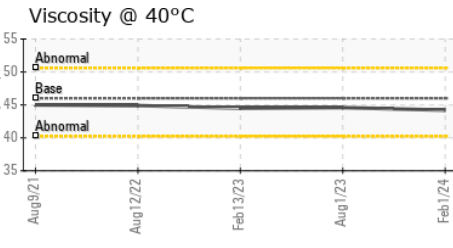
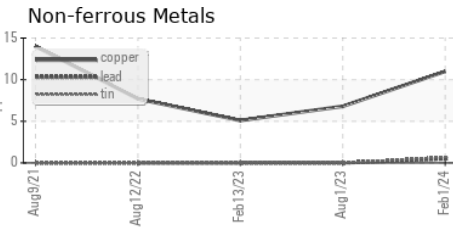
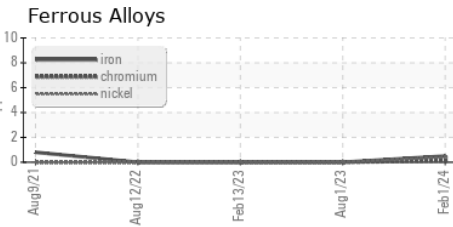
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.2	44.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP121713 **Received** : 23 Feb 2024  
**Lab Number** : 06098408 **Tested** : 26 Feb 2024  
**Unique Number** : 10896638 **Diagnosed** : 26 Feb 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**KLINGE COATING**  
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 INDIANAPOLIS, IN  
 US 46203  
 Contact: J. BUTNER  
 jbutner@klingecoatings.com  
 T:  
 F:

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)