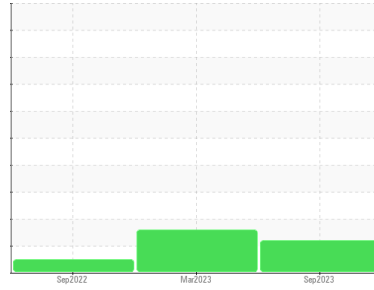




# PROBLEM SUMMARY

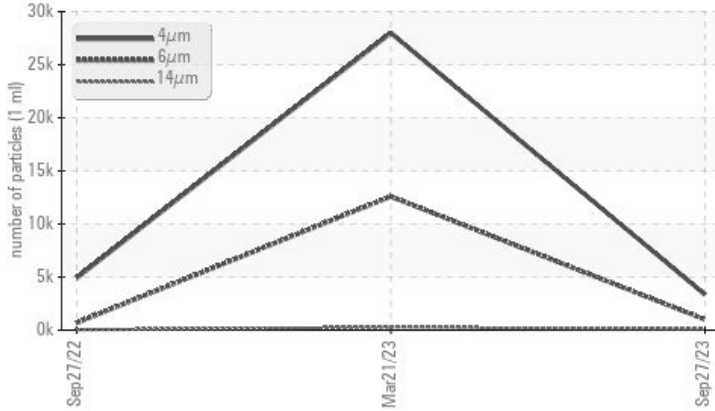
Sample Rating Trend



Machine Id  
**8015268 (S/N 1193)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >14µm	ASTM D7647	>80	▲ <b>87</b>	▲ 265	26
Particles >21µm	ASTM D7647	>20	▲ <b>22</b>	▲ 22	6
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>19/17/14</b>	▲ 22/21/15	19/17/12

Customer Id: HILWAU  
 Sample No.: KC125380  
 Lab Number: 06010786  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 21 Mar 2023 Diag: Don Baldrige

ISO



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. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 27 Sep 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

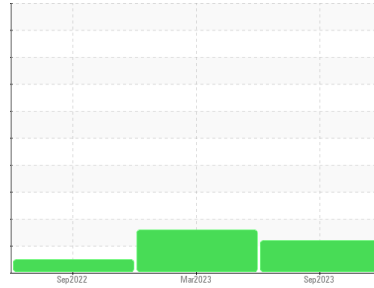
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**8015268 (S/N 1193)**  
 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 moderate 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>KC125380</b>	KC105693	KC106518
Sample Date	Client Info	<b>27 Sep 2023</b>	21 Mar 2023	27 Sep 2022
Machine Age	hrs	<b>5938</b>	4550	3123
Oil Age	hrs	<b>2165</b>	1417	3123
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Changed
Sample Status		<b>ATTENTION</b>	ABNORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	2	3
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>2</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	1	4
Copper	ppm	ASTM D5185m >50	<b>11</b>	5	6
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
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>	10	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	2	2
Magnesium	ppm	ASTM D5185m 90	<b>14</b>	56	30
Calcium	ppm	ASTM D5185m 2	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	4	6
Zinc	ppm	ASTM D5185m	<b>29</b>	31	40

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m	<b>6</b>	15	9
Potassium	ppm	ASTM D5185m >20	<b>3</b>	5	13
Water	%	ASTM D6304 >0.05	<b>0.008</b>	0.017	0.022
ppm Water	ppm	ASTM D6304 >500	<b>86.1</b>	171.7	223.4

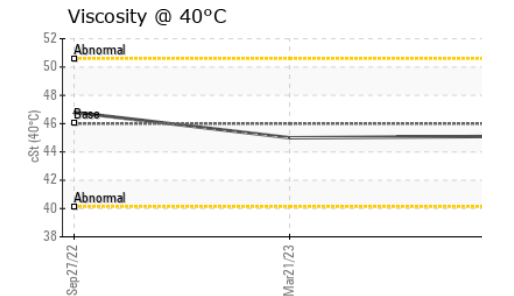
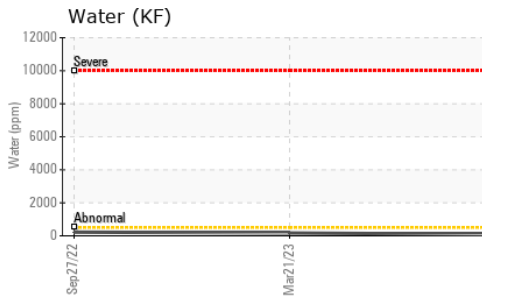
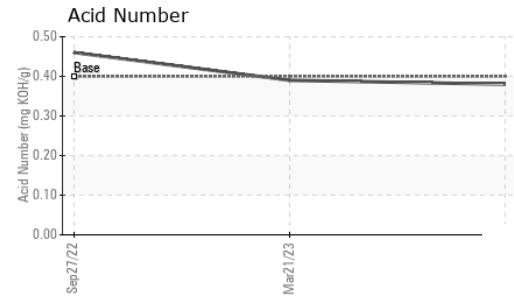
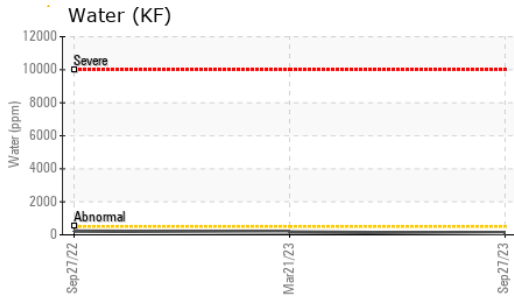
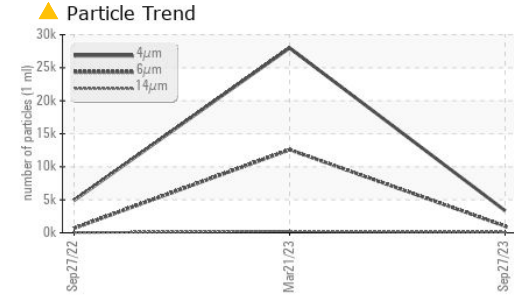
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>3352</b>	27996	4916
Particles >6µm	ASTM D7647 >1300	<b>1003</b>	▲ 12588	697
Particles >14µm	ASTM D7647 >80	▲ <b>87</b>	▲ 265	26
Particles >21µm	ASTM D7647 >20	▲ <b>22</b>	▲ 22	6
Particles >38µm	ASTM D7647 >4	<b>1</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>19/17/14</b>	▲ 22/21/15	19/17/12

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.38</b>	0.39	0.46

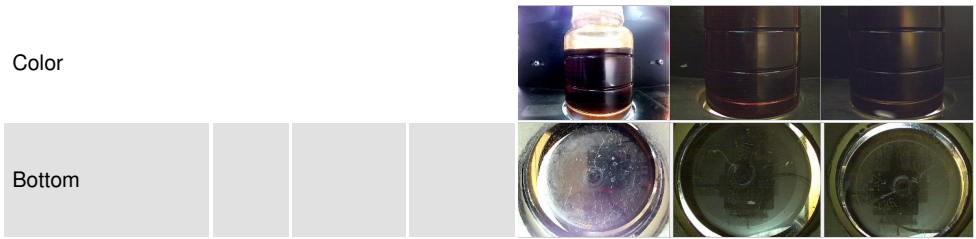
# OIL ANALYSIS REPORT



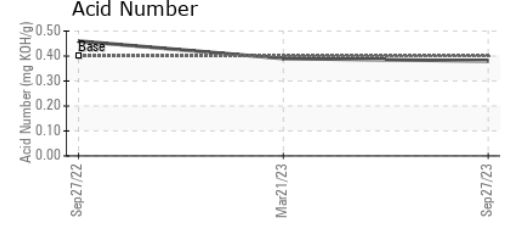
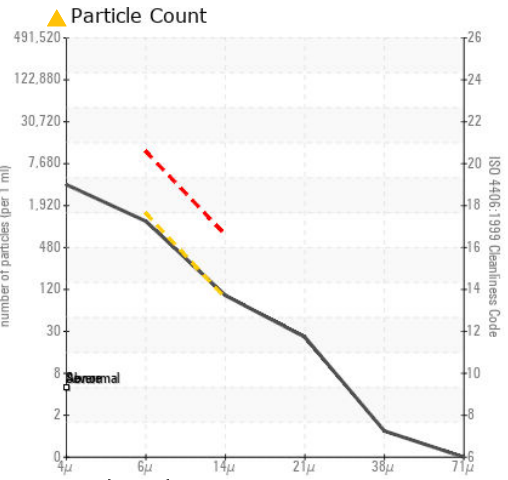
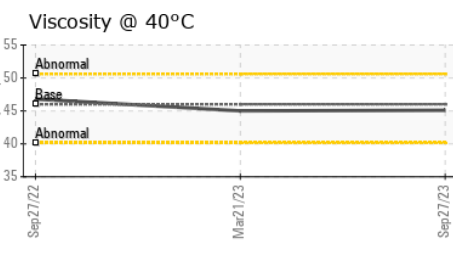
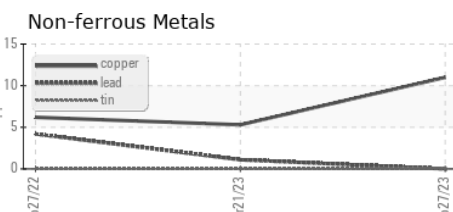
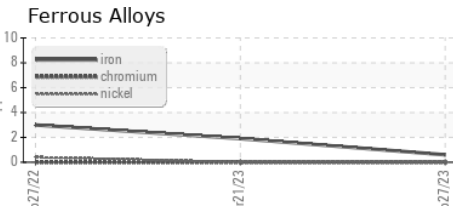
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.1	45.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC125380 **Received** : 17 Nov 2023  
**Lab Number** : 06010786 **Diagnosed** : 20 Nov 2023  
**Unique Number** : 10749930 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**HILL MANUFACTURING INC**  
 314 W CHESTNUT ST  
 WAUSEON, OH  
 US 43567  
 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: