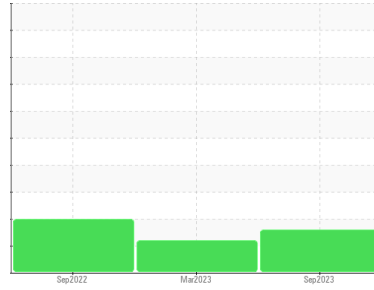




# PROBLEM SUMMARY

Sample Rating Trend



ISO



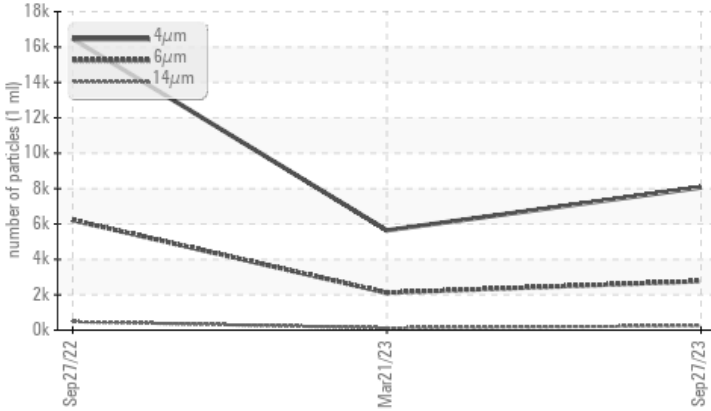
Machine Id  
**8038992 (S/N 1197)**

Component  
**Compressor**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 2771	▲ 2113	▲ 6217
Particles >14µm	ASTM D7647	>80	▲ 248	▲ 121	▲ 479
Particles >21µm	ASTM D7647	>20	▲ 60	15	▲ 95
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	▲ 20/18/14	▲ 21/20/16

Customer Id: HILWAU  
Sample No.: KC125385  
Lab Number: 06010807  
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

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

## 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 moderate 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

ISO



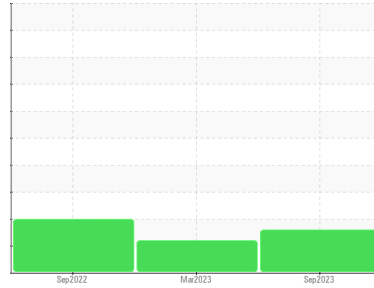
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**8038992 (S/N 1197)**

Component

**Compressor**

Fluid

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

**DIAGNOSIS**

**▲ Recommendation**

We recommend you service the filters on this component. 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>KC125385</b>	KC105633	KC107456	
Sample Date	Client Info	<b>27 Sep 2023</b>	21 Mar 2023	27 Sep 2022	
Machine Age	hrs	Client Info	<b>6562</b>	5175	3751
Oil Age	hrs	Client Info	<b>0</b>	1424	3461
Oil Changed	Client Info	<b>N/A</b>	Not Changd	Changed	
Sample Status		<b>ABNORMAL</b>	ATTENTION	ABNORMAL	

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	<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>2</b>	0	2
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>10</b>	4	13
Tin	ppm	ASTM D5185m >10	<b>0</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>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>7</b>	38	5
Calcium	ppm	ASTM D5185m 2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	2	0
Zinc	ppm	ASTM D5185m	<b>26</b>	16	24

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m	<b>4</b>	2	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	3	0
Water	%	ASTM D6304 >0.05	<b>0.010</b>	0.013	0.016
ppm Water	ppm	ASTM D6304 >500	<b>108.6</b>	136.2	164.7

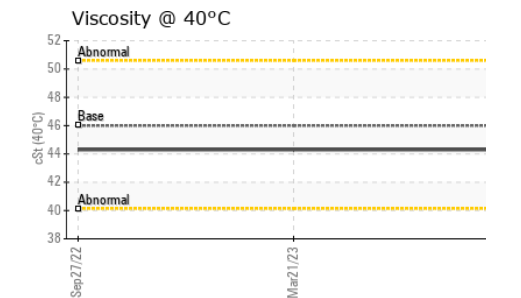
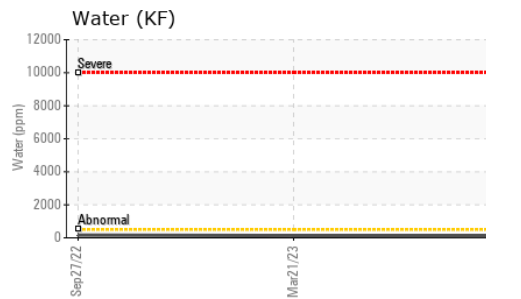
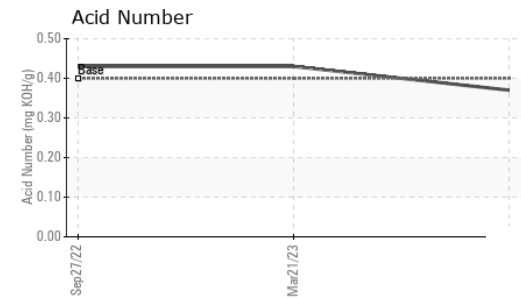
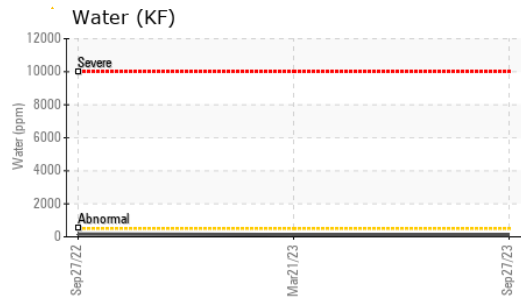
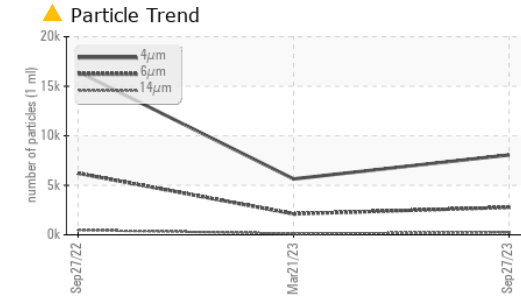
**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>8065</b>	5641	16464
Particles >6µm	ASTM D7647 >1300	<b>▲ 2771</b>	▲ 2113	▲ 6217
Particles >14µm	ASTM D7647 >80	<b>▲ 248</b>	▲ 121	▲ 479
Particles >21µm	ASTM D7647 >20	<b>▲ 60</b>	15	▲ 95
Particles >38µm	ASTM D7647 >4	<b>2</b>	1	▲ 6
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	1
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 20/19/15</b>	▲ 20/18/14	▲ 21/20/16

**FLUID DEGRADATION**

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.37</b>	0.43	0.43

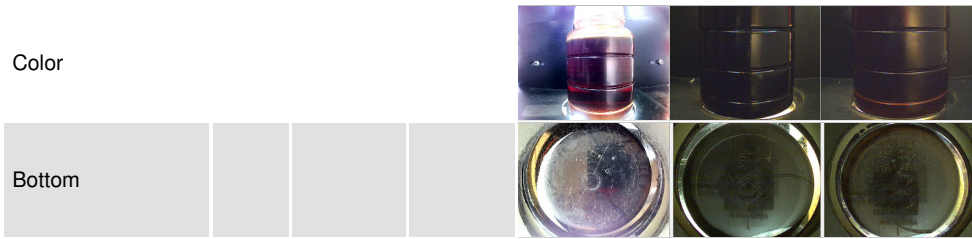
# OIL ANALYSIS REPORT



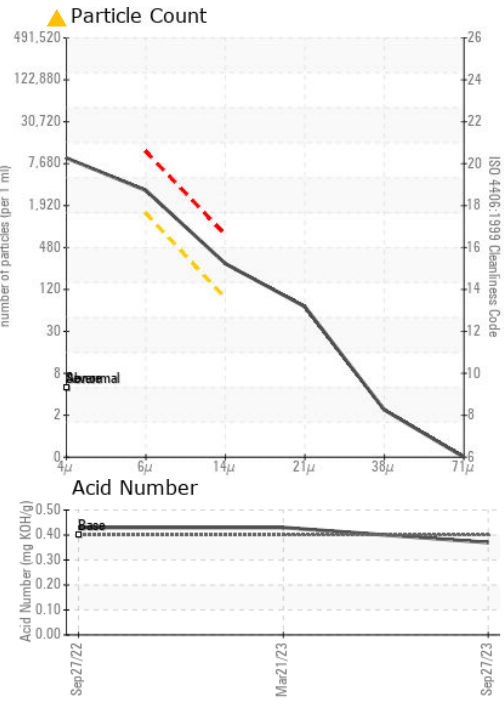
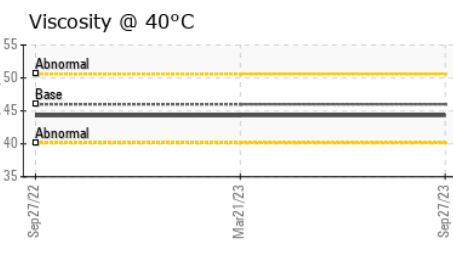
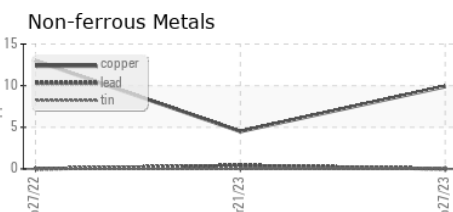
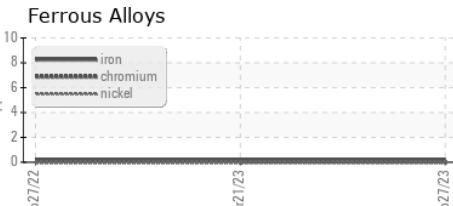
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.3	44.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC125385 **Received** : 17 Nov 2023  
**Lab Number** : 06010807 **Diagnosed** : 20 Nov 2023  
**Unique Number** : 10749951 **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: