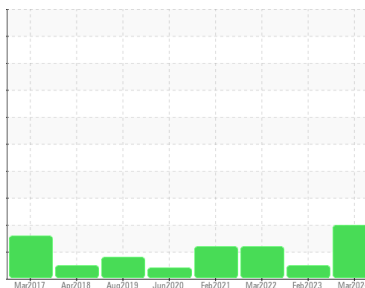


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER AS 20T 5616977 (S/N 1139)**

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>KCPA013687</b>	KCP55882	KCP41088
Sample Date	Client Info			<b>15 Mar 2024</b>	28 Feb 2023	08 Mar 2022
Machine Age	hrs	Client Info		<b>33950</b>	29544	24780
Oil Age	hrs	Client Info		<b>4000</b>	4818	5000
Oil Changed	Client Info			<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>3</b>	0	0
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>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>38</b>	49	53
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
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	<1
Barium	ppm	ASTM D5185m	90	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m		<b>3</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	90	<b>7</b>	6	<1
Calcium	ppm	ASTM D5185m	2	<b>&lt;1</b>	<1	0
Phosphorus	ppm	ASTM D5185m		<b>0</b>	1	2
Zinc	ppm	ASTM D5185m		<b>63</b>	65	51
Sulfur	ppm	ASTM D5185m		<b>20628</b>	17815	14618

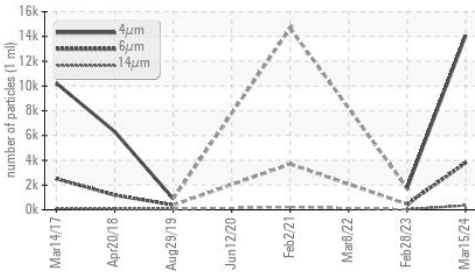
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>3</b>	2	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Water	%	ASTM D6304	>0.05	<b>0.005</b>	0.008	0.004
ppm Water	ppm	ASTM D6304	>500	<b>58</b>	80.8	47.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>14063</b>	1759	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 3792</b>	455	---
Particles >14µm		ASTM D7647	>80	<b>▲ 350</b>	32	---
Particles >21µm		ASTM D7647	>20	<b>▲ 120</b>	8	---
Particles >38µm		ASTM D7647	>4	<b>▲ 6</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 21/19/16</b>	18/16/12	---

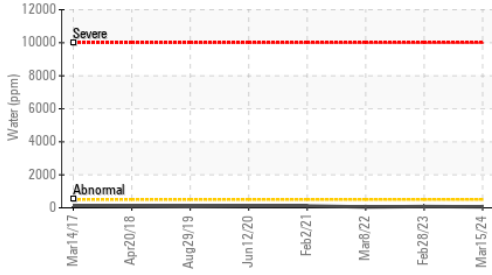
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.36</b>	0.32	0.339

# OIL ANALYSIS REPORT

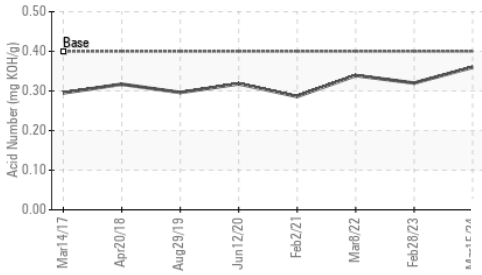
## Particle Trend



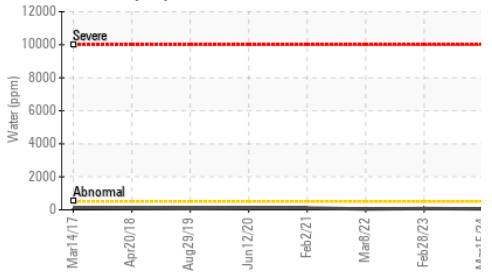
## Water (KF)



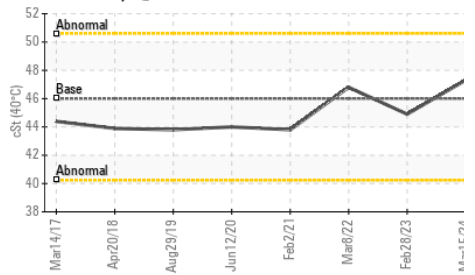
## Acid Number



## Water (KF)



## Viscosity @ 40°C

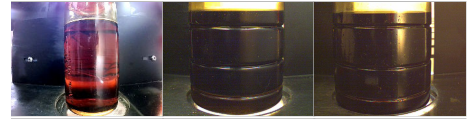


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

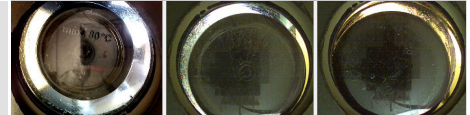
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	47.3	44.9	46.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

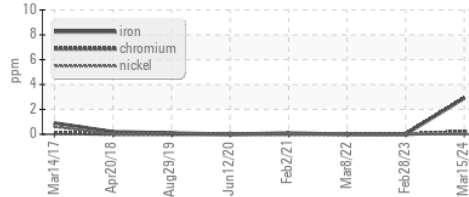


Bottom

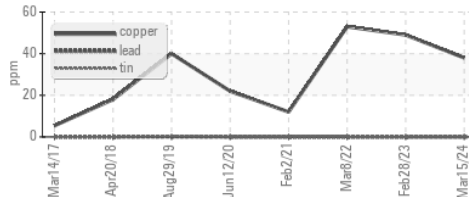


## GRAPHS

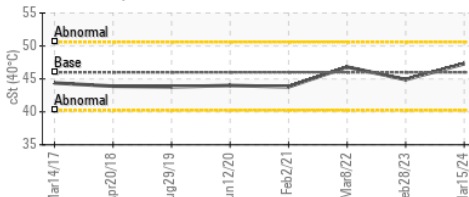
### Ferrous Alloys



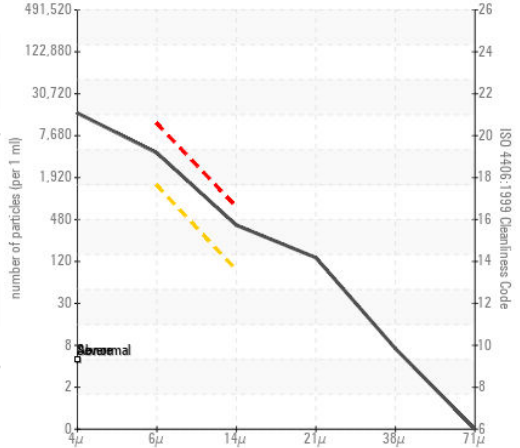
### Non-ferrous Metals



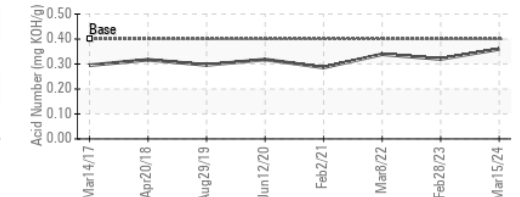
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA013687 **Received** : 19 Mar 2024  
**Lab Number** : 06123218 **Tested** : 20 Mar 2024  
**Unique Number** : 10937369 **Diagnosed** : 21 Mar 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**LEATHERBROOK HOLSTEINS**  
 1363 US HWY 19 S  
 AMERICUS, GA  
 US 31719  
 Contact: J. GRAFT  
 jgraft@bellsouth.net

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: