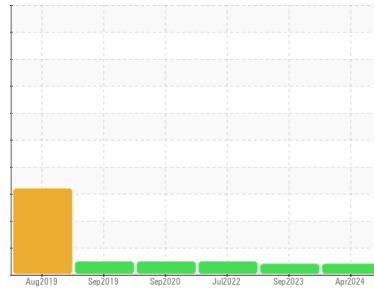




# OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id  
**KAESER BSD50 6431347 (S/N 1902)**  
 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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris 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>KCPA016888</b>	KCPA005628	KCP51640
Sample Date	Client Info		<b>01 Apr 2024</b>	06 Sep 2023	28 Jul 2022
Machine Age	hrs	Client Info	<b>12299</b>	11033	9223
Oil Age	hrs	Client Info	<b>6742</b>	0	3100
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</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>0</b>	<1	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>2</b>	3	6
Tin	ppm	ASTM D5185m >10	<b>&lt;1</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>8</b>	0	4
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 90	<b>57</b>	53	35
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>0</b>	0	<1
Zinc	ppm	ASTM D5185m	<b>6</b>	24	29
Sulfur	ppm	ASTM D5185m	<b>20339</b>	19330	16841

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m	<b>16</b>	18	21
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	5	2
Water	%	ASTM D6304 >0.05	<b>0.037</b>	0.023	0.016
ppm Water	ppm	ASTM D6304 >500	<b>375</b>	232.4	162.1

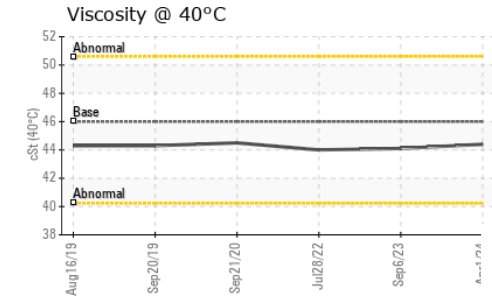
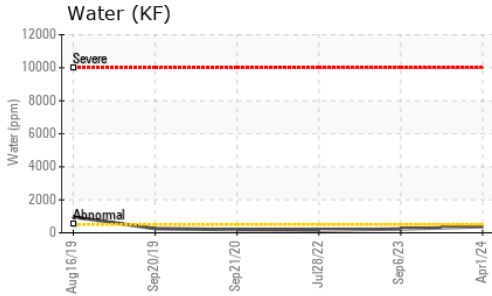
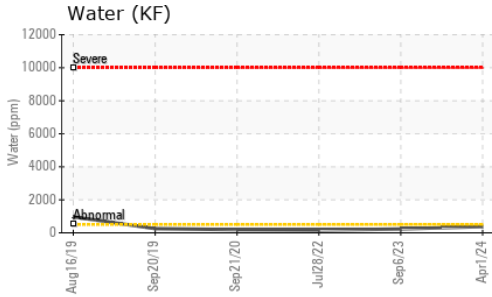
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>---</b>	---	5624
Particles >6µm	ASTM D7647 >1300		<b>---</b>	---	1176
Particles >14µm	ASTM D7647 >80		<b>---</b>	---	66
Particles >21µm	ASTM D7647 >20		<b>---</b>	---	16
Particles >38µm	ASTM D7647 >4		<b>---</b>	---	1
Particles >71µm	ASTM D7647 >3		<b>---</b>	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>---</b>	---	20/17/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.39</b>	0.34	0.34

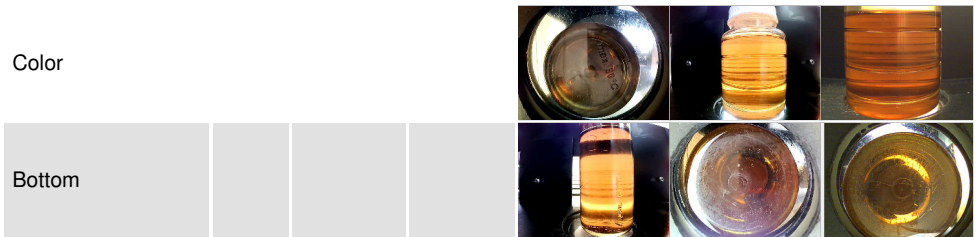
# OIL ANALYSIS REPORT



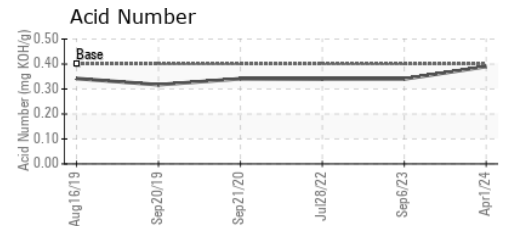
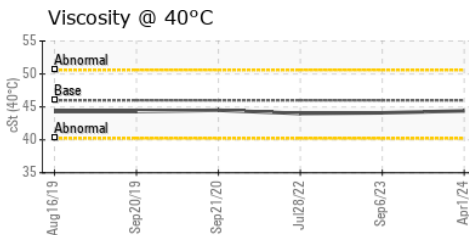
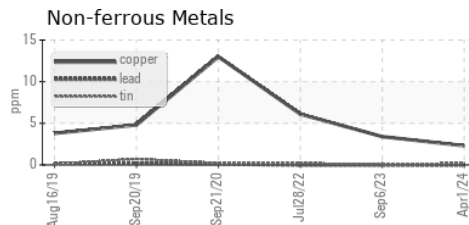
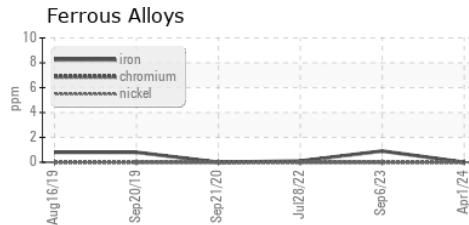
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.4	44.1

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : KCPA016888

**Lab Number** : 06144277

**Unique Number** : 10969085

**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**Received** : 10 Apr 2024

**Tested** : 11 Apr 2024

**Diagnosed** : 11 Apr 2024 - Doug Bogart

**SWISS AMERICAN**

2055 LUNA RD #126

CARROLLTON, TX

US 75006

Contact:

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: