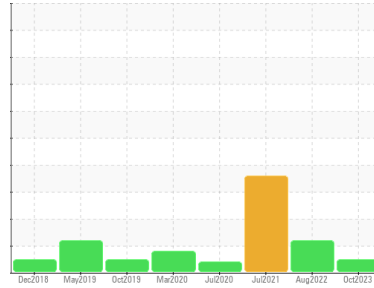




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER SFC 45 6501824 (S/N 1037)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCPA009354</b>	KCP33350	KCP41656
Sample Date	Client Info			<b>30 Oct 2023</b>	25 Aug 2022	07 Jul 2021
Machine Age	hrs	Client Info		<b>44711</b>	34674	24791
Oil Age	hrs	Client Info		<b>0</b>	9883	3369
Oil Changed	Client Info			<b>N/A</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>1</b>	0	<1
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>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	4	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>10</b>	11	10
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

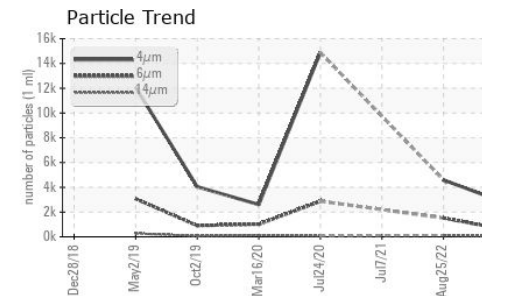
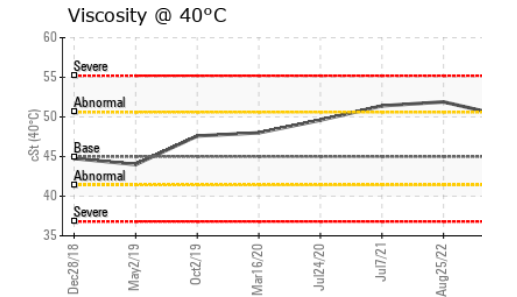
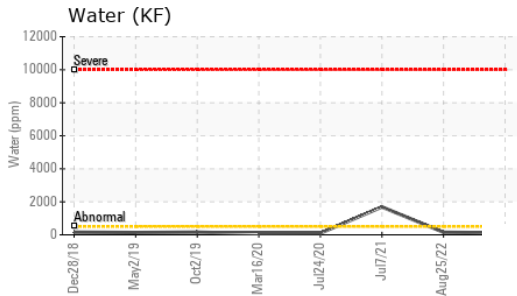
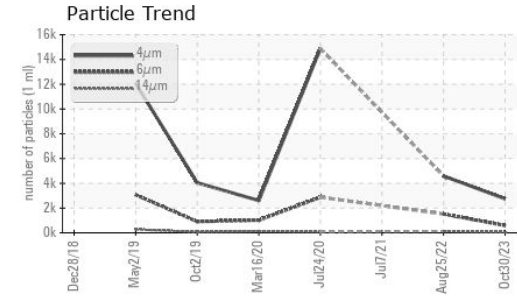
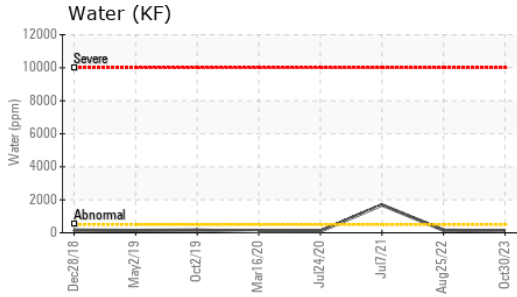
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	90	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	100	<b>0</b>	5	1
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	0	8
Zinc	ppm	ASTM D5185m	0	<b>0</b>	5	0
Sulfur	ppm	ASTM D5185m	23500	<b>18498</b>	18040	19889

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	<1	1
Sodium	ppm	ASTM D5185m		<b>5</b>	5	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.012</b>	0.015	▲ 0.169
ppm Water	ppm	ASTM D6304	>500	<b>122.1</b>	153.3	▲ 1690

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2743</b>	4592	---
Particles >6µm		ASTM D7647	>1300	<b>587</b>	▲ 1517	---
Particles >14µm		ASTM D7647	>80	<b>47</b>	▲ 125	---
Particles >21µm		ASTM D7647	>20	<b>14</b>	19	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>19/16/13</b>	▲ 19/18/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.49	0.518

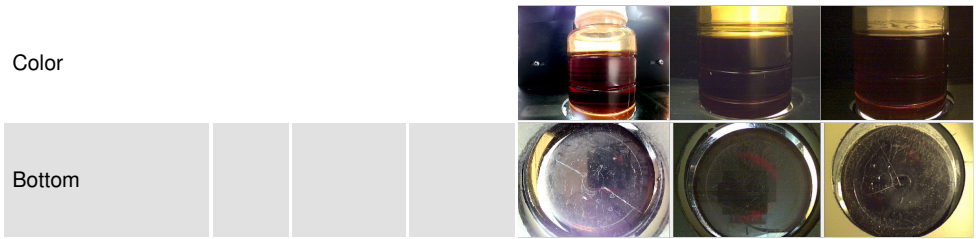
# OIL ANALYSIS REPORT



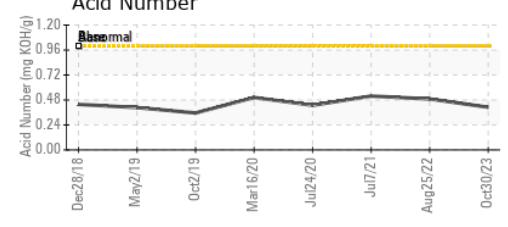
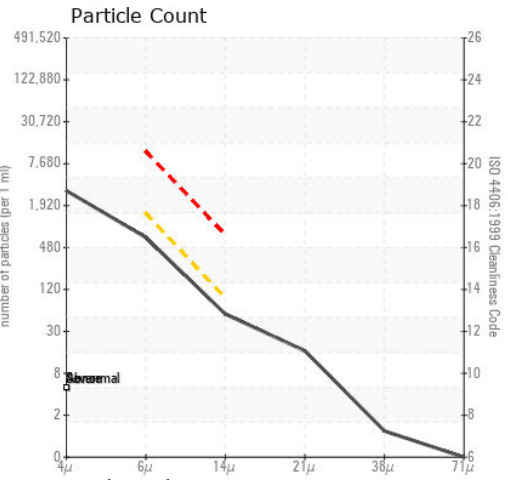
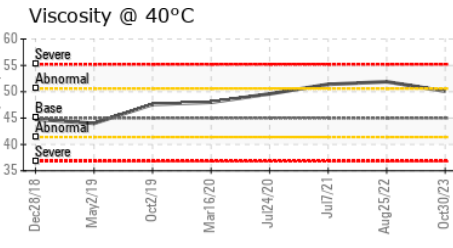
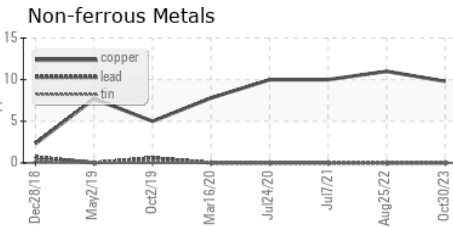
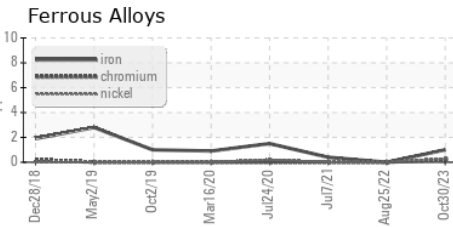
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	50.1	51.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA009354  
**Lab Number** : 06011496  
**Unique Number** : 10750640  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BOUTWELL OWENS AND CO INC**  
 251 AUTHORITY DR  
 FITCHBURG, MA  
 US 01420  
 Contact: B. BENSON  
 BBENSON@OLIVERINC.COM

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: