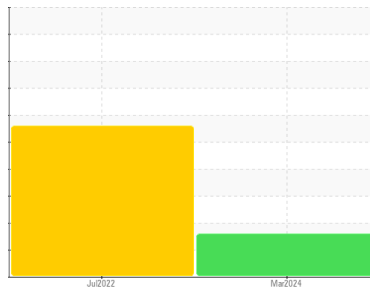


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SX 7.5 4523600 - 1071**

Component  
**Compressor**

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

## DIAGNOSIS

### ▲ Recommendation

Oil and 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>KCPA015983</b>	KCP51559	---
Sample Date	Client Info			<b>21 Mar 2024</b>	07 Jul 2022	---
Machine Age	hrs	Client Info		<b>50058</b>	35189	---
Oil Age	hrs	Client Info		<b>2993</b>	26355	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>50	<b>14</b>	▲ 57	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

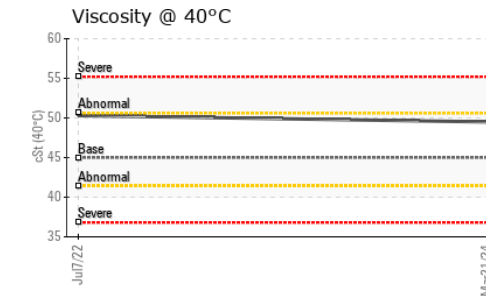
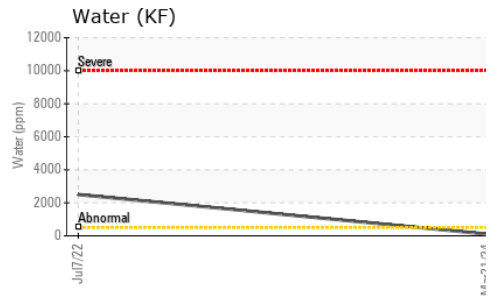
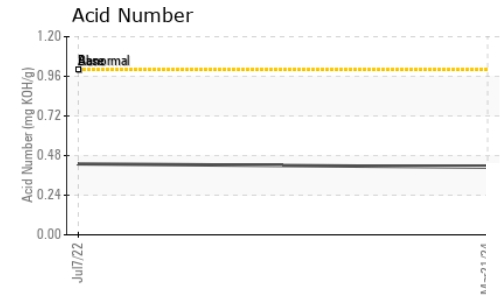
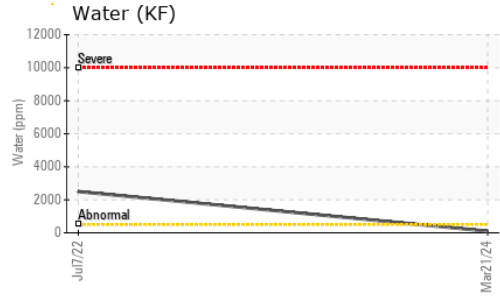
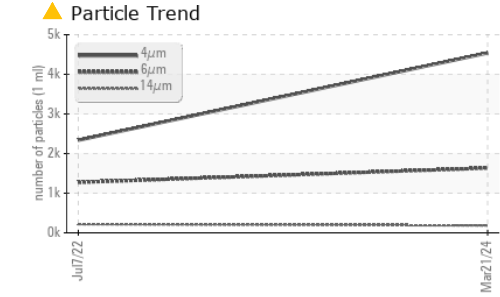
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>9</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>12</b>	<1	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>&lt;1</b>	4	---
Zinc	ppm	ASTM D5185m	0	<b>36</b>	31	---
Sulfur	ppm	ASTM D5185m	23500	<b>19044</b>	16749	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>3</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Water	%	ASTM D6304	>0.05	<b>0.010</b>	▲ 0.250	---
ppm Water	ppm	ASTM D6304	>500	<b>100</b>	▲ 2500	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>4540</b>	2338	---
Particles >6µm		ASTM D7647	>1300	● <b>1634</b>	1274	---
Particles >14µm		ASTM D7647	>80	▲ <b>185</b>	▲ 217	---
Particles >21µm		ASTM D7647	>20	▲ <b>59</b>	▲ 73	---
Particles >38µm		ASTM D7647	>4	<b>4</b>	▲ 11	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>19/18/15</b>	▲ 18/17/15	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.43	---

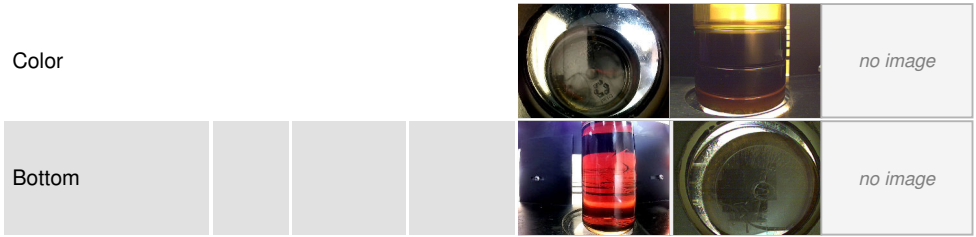
# OIL ANALYSIS REPORT



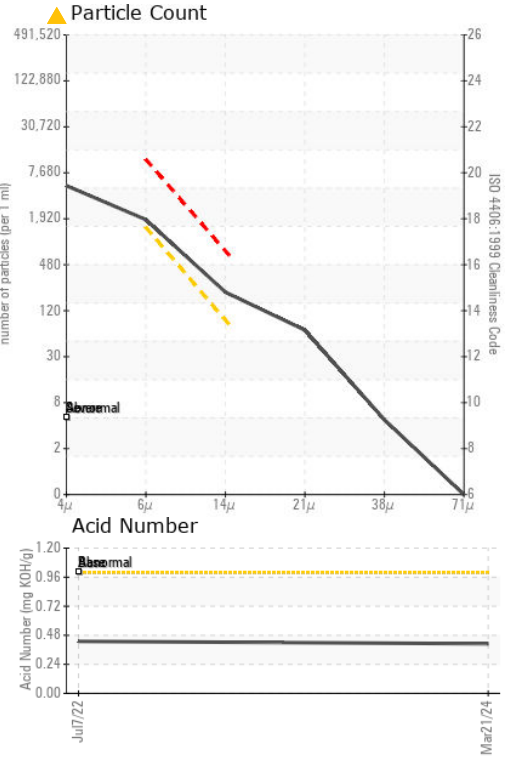
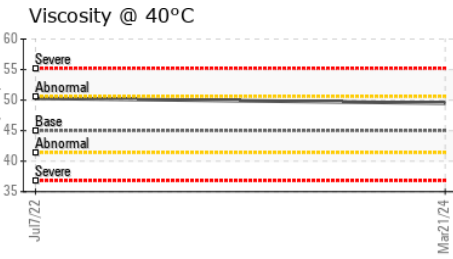
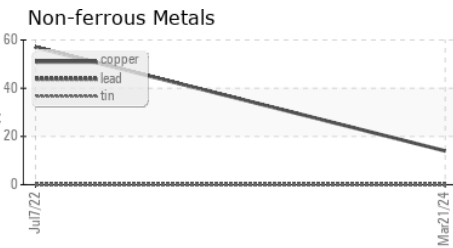
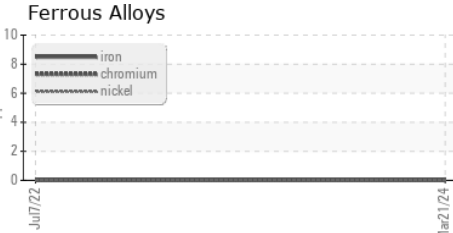
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.5	50.3

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015983  
**Lab Number** : 06143109  
**Unique Number** : 10967917  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 09 Apr 2024  
**Tested** : 10 Apr 2024  
**Diagnosed** : 11 Apr 2024 - Angela Borella

**CITY OF PORTSMOUTH GARAGE**  
 55 MARYANN ST  
 PORTSMOUTH, OH  
 US 45662  
 Contact: D. EASTER  
 deaster@portsmouthoh.org

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)