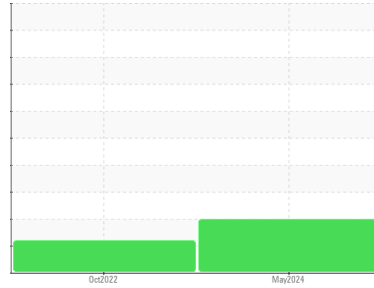




# OIL ANALYSIS REPORT

## Sample Rating Trend



## ADDITIVES



Machine Id  
**KAESER CSD 100 7833233 (S/N 1136)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-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

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA016554</b>	KCP38504	---
Sample Date	Client Info			<b>28 May 2024</b>	14 Oct 2022	---
Machine Age	hrs	Client Info		<b>16814</b>	6285	---
Oil Age	hrs	Client Info		<b>6006</b>	3459	---
Oil Changed	Client Info			<b>Changed</b>	Not Changd	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

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

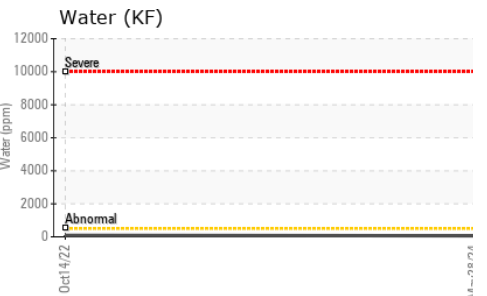
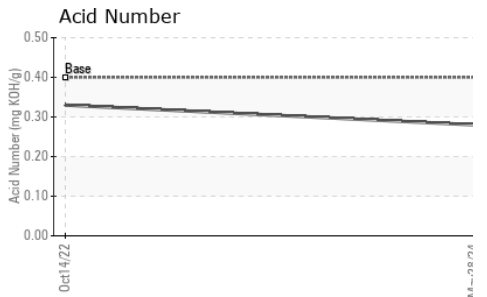
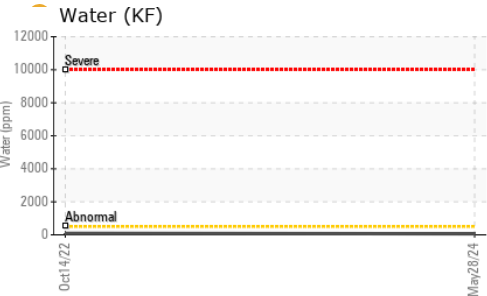
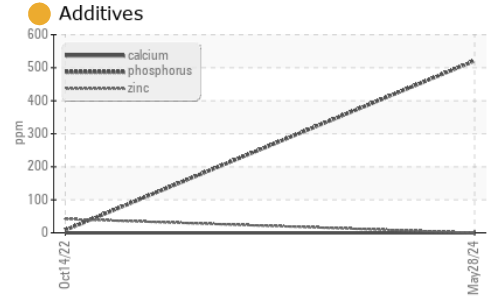
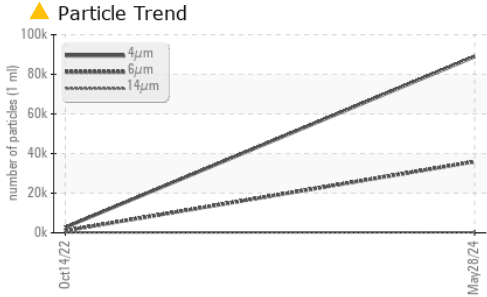
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	90	<1	6	---
Calcium	ppm	ASTM D5185m	2	0	0	---
Phosphorus	ppm	ASTM D5185m		● 521	8	---
Zinc	ppm	ASTM D5185m		0	42	---
Sulfur	ppm	ASTM D5185m		● 228	20780	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Sodium	ppm	ASTM D5185m		0	1	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Water	%	ASTM D6304	>0.05	0.006	0.009	---
ppm Water	ppm	ASTM D6304	>500	64	90.5	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		88941	2722	---
Particles >6µm		ASTM D7647	>1300	▲ 35867	1008	---
Particles >14µm		ASTM D7647	>80	▲ 270	▲ 197	---
Particles >21µm		ASTM D7647	>20	17	▲ 62	---
Particles >38µm		ASTM D7647	>4	1	2	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 24/22/15	▲ 19/17/15	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.28	0.33	---

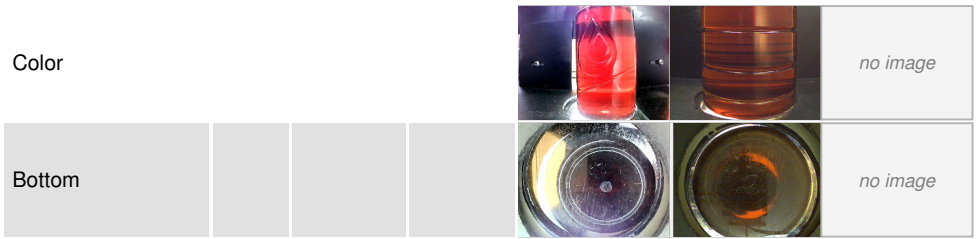
# OIL ANALYSIS REPORT



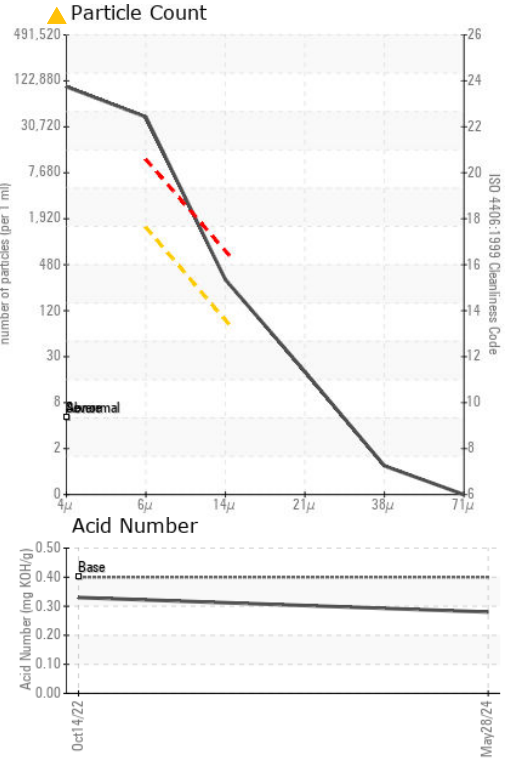
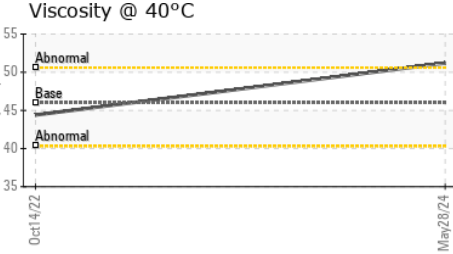
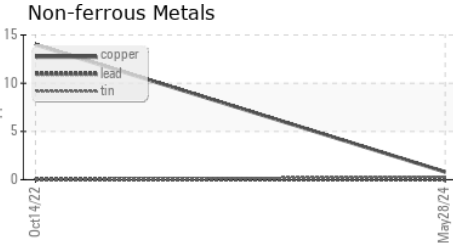
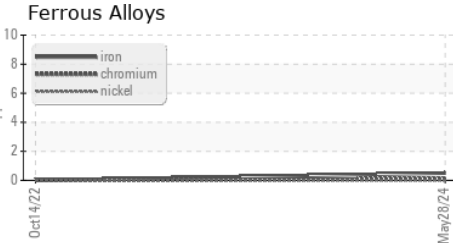
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	51.2	44.4	---

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016554 **Received** : 13 Jun 2024  
**Lab Number** : 06209235 **Tested** : 16 Jun 2024  
**Unique Number** : 11076696 **Diagnosed** : 16 Jun 2024 - Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**MARPAN RECYCLING LLC**  
 6020 WOODVILLE HWY  
 TALLAHASSEE, FL  
 US 32305  
 Contact: JOHN  
 john@marpan.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)