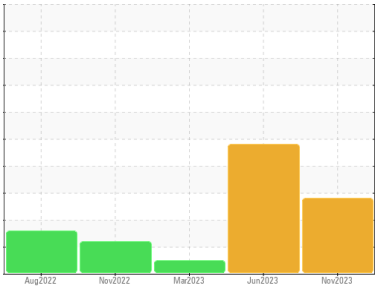
PROBLEM SUMMARY

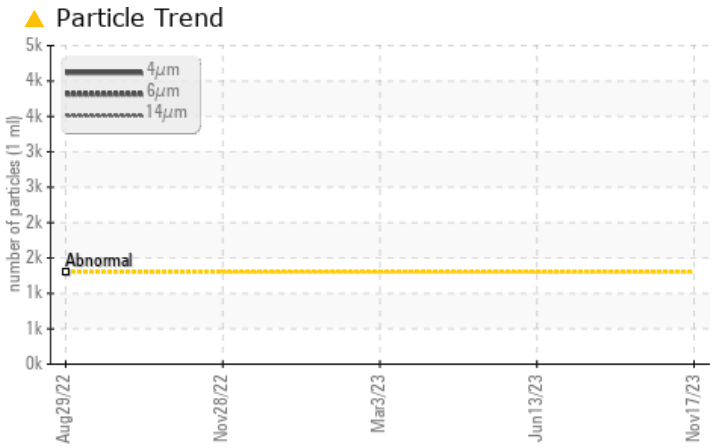
Sample Rating Trend



ISO

Area
Paper Cup Machines
Machine Id
PMC 1003 POS-421 (S/N 189465)
Component
Circulating System
Fluid
SUMMIT Syngear SH-1032 320 (85 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Particles >4µm		ASTM D7647	>1300	▲ **4071**	---	---
Particles >6µm		ASTM D7647	>320	▲ **2218**	---	---
Particles >14µm		ASTM D7647	>80	▲ **377**	---	---
Particles >21µm		ASTM D7647	>20	▲ **127**	---	---
Particles >38µm		ASTM D7647	>4	▲ **20**	---	---
Particles >71µm		ASTM D7647	>3	▲ **2**	---	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/18/16**	---	---

Customer Id: DARDALTX
Sample No.: TO50001992
Lab Number: 06015055
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

13 Jun 2023 Diag: Jonathan Hester

WATER

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.All component wear rates are normal. Appearance is hazy. Free water present. There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

03 Mar 2023 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

28 Nov 2022 Diag: Doug Bogart

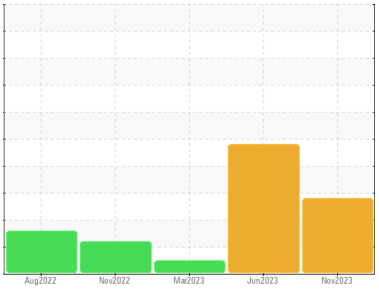
CONTAMINANT

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Elemental level of silicon (Si) above normal. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Paper Cup Machines
Machine Id
PMC 1003 POS-421 (S/N 189465)
Component
Circulating System
Fluid
SUMMIT Syngear SH-1032 320 (85 GAL)

DIAGNOSIS

Recommendation
We recommend you service the filters on this component. 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		**TO50001992**	TO50001754	TO50001395
Sample Date		Client Info		**17 Nov 2023**	13 Jun 2023	03 Mar 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**16**	18	16
Iron	ppm	ASTM D5185m		**15**	12	11
Chromium	ppm	ASTM D5185m		**<1**	0	0
Nickel	ppm	ASTM D5185m		**7**	9	8
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m		**2**	0	<1
Lead	ppm	ASTM D5185m		**0**	<1	<1
Copper	ppm	ASTM D5185m		**4**	3	3
Tin	ppm	ASTM D5185m		**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**76**	78	71
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	1
Magnesium	ppm	ASTM D5185m		**<1**	0	0
Calcium	ppm	ASTM D5185m		**3**	1	3
Phosphorus	ppm	ASTM D5185m		**502**	458	452
Zinc	ppm	ASTM D5185m		**0**	<1	0
Sulfur	ppm	ASTM D5185m		**6747**	7911	7792

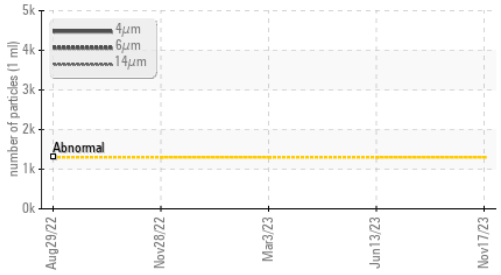
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**5749**	4503	4586
Sodium	ppm	ASTM D5185m		**<1**	0	<1
Potassium	ppm	ASTM D5185m	>20	**1**	2	<1
Water	%	ASTM D6304		**0.024**	▲ 0.145	---
ppm Water	ppm	ASTM D6304		**245**	▲ 1450	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **4071**	---	---
Particles >6µm		ASTM D7647	>320	▲ **2218**	---	---
Particles >14µm		ASTM D7647	>80	▲ **377**	---	---
Particles >21µm		ASTM D7647	>20	▲ **127**	---	---
Particles >38µm		ASTM D7647	>4	▲ **20**	---	---
Particles >71µm		ASTM D7647	>3	▲ **2**	---	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/18/16**	---	---

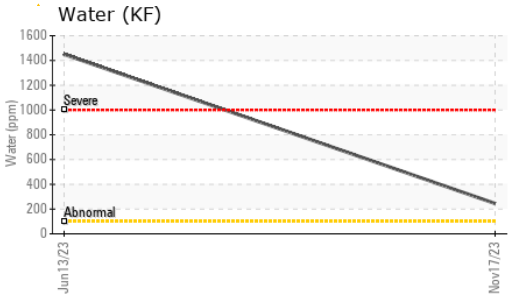
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.64**	0.80	---

OIL ANALYSIS REPORT

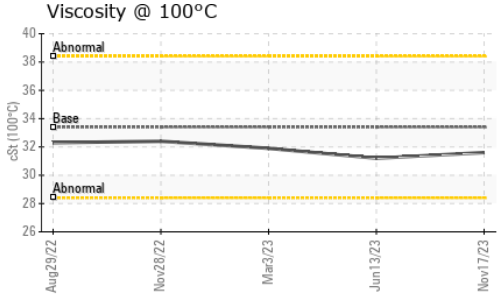
Particle Trend



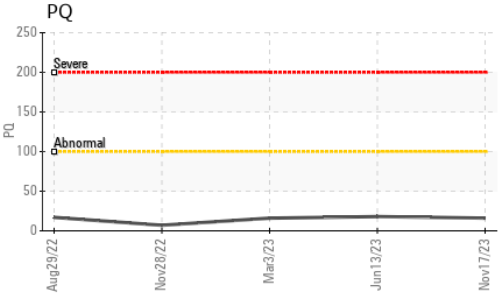
Water (KF)



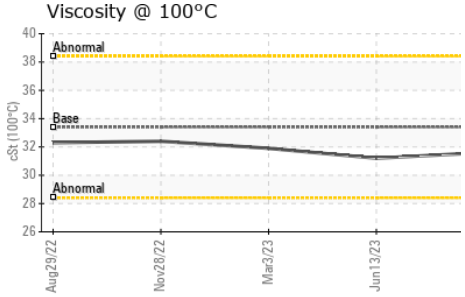
Viscosity @ 100°C



PQ



Viscosity @ 100°C



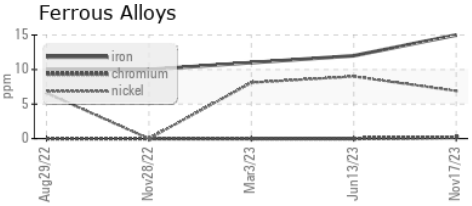
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	LIGHT	NONE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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	326	**310**	310	311
Visc @ 100°C	cSt	ASTM D445	33.4	**31.6**	31.2	31.9
Viscosity Index (VI)	Scale	ASTM D2270	145	**141**	138	142

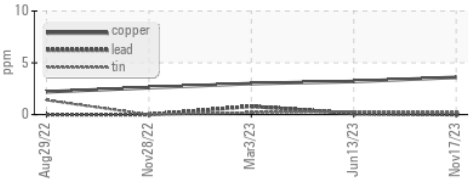
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

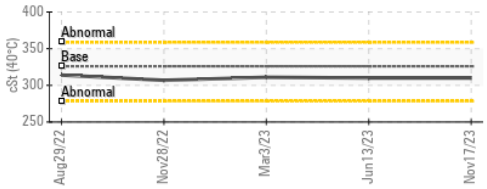
Ferrous Alloys



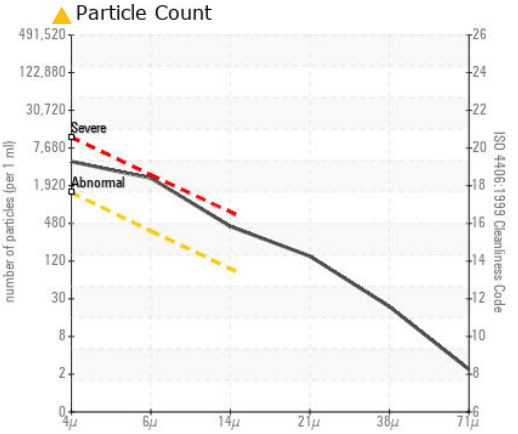
Non-ferrous Metals



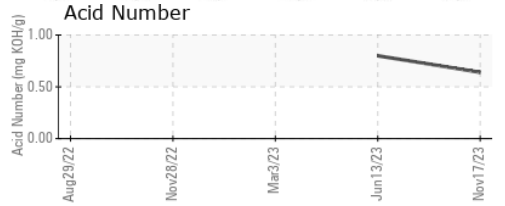
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001992 **Received** : 22 Nov 2023
Lab Number : 06015055 **Diagnosed** : 30 Nov 2023
Unique Number : 10754199 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)

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)

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