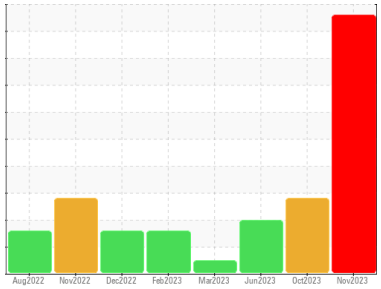
PROBLEM SUMMARY

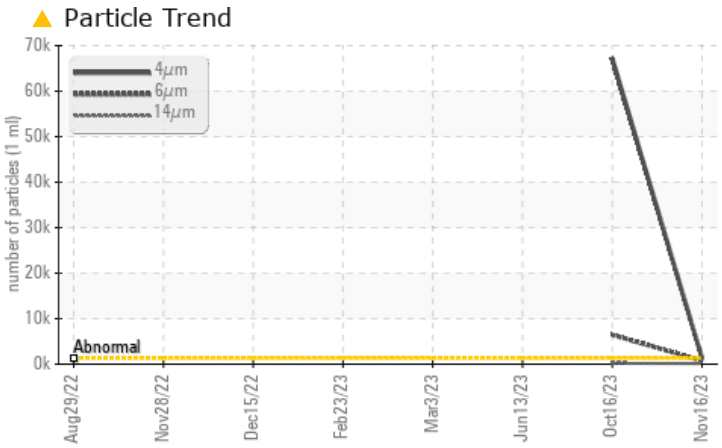
Sample Rating Trend

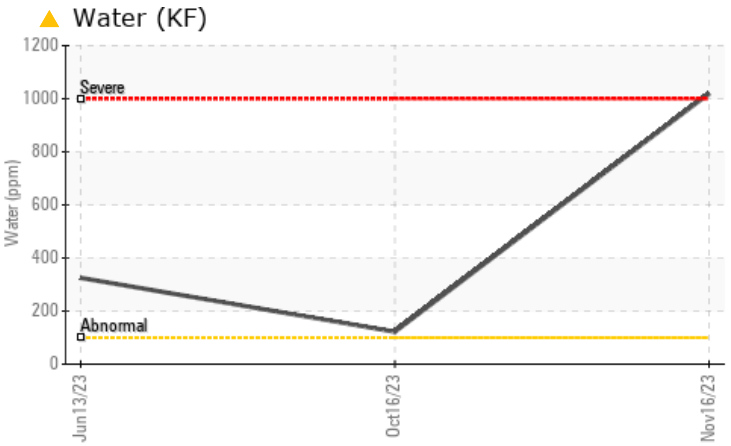


WATER

Area
Paper Cup Machines
Machine Id
PMC 1003 POS-431 (S/N 193568)
Component
Circulating System
Fluid
SUMMIT Syngear SH-1032 320 (85 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Water	%	ASTM D6304		▲ **0.102**	0.012	0.032
ppm Water	ppm	ASTM D6304		▲ **1020**	122.1	325.1
Particles >4µm		ASTM D7647	>1300	▲ **1348**	▲ 67241	---
Particles >6µm		ASTM D7647	>320	▲ **735**	▲ 6446	---
Particles >14µm		ASTM D7647	>80	▲ **125**	▲ 177	---
Particles >21µm		ASTM D7647	>20	▲ **42**	▲ 54	---
Particles >38µm		ASTM D7647	>4	▲ **7**	3	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **18/17/14**	▲ 23/20/15	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	HAZY	▲ HAZY
Emulsified Water	scalar	*Visual		▲ **0.2%**	NEG	NEG
Free Water	scalar	*Visual		⬢ **1.0**	NEG	NEG

Customer Id: DARDALTX
Sample No.: TO50001971
Lab Number: 06014033
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
Water Drain-off	---	---	?	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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

16 Oct 2023 Diag: Jonathan Hester

SEDIMENT

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. There is a high amount of particulates 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

13 Jun 2023 Diag: Jonathan Hester

SEDIMENT

We recommend you service the filters on this component. 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.All component wear rates are normal. Appearance is hazy. Moderate concentration of visible dirt/debris 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

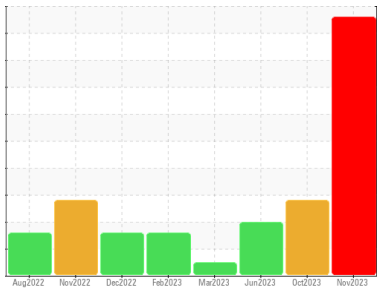
NORMAL

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

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
Paper Cup Machines
Machine Id
PMC 1003 POS-431 (S/N 193568)
Component
Circulating System
Fluid
SUMMIT Syngear SH-1032 320 (85 GAL)

DIAGNOSIS

Recommendation
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.

Wear
All component wear rates are normal.

Contamination
Appearance is hazy. There is a high amount of particulates present in the oil. Free water present. There is a trace of moisture 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		**TO50001971**	TO50001683	TO50001727
Sample Date		Client Info		**16 Nov 2023**	16 Oct 2023	13 Jun 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				**SEVERE**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**11**	16	20
Iron	ppm	ASTM D5185m		**14**	13	19
Chromium	ppm	ASTM D5185m		**0**	0	0
Nickel	ppm	ASTM D5185m		**6**	6	8
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m		**0**	<1	0
Lead	ppm	ASTM D5185m		**0**	0	<1
Copper	ppm	ASTM D5185m		**3**	2	3
Tin	ppm	ASTM D5185m		**0**	0	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**92**	92	144
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**0**	0	0
Calcium	ppm	ASTM D5185m		**56**	0	<1
Phosphorus	ppm	ASTM D5185m		**461**	498	633
Zinc	ppm	ASTM D5185m		**2**	0	6
Sulfur	ppm	ASTM D5185m		**6808**	7816	11923

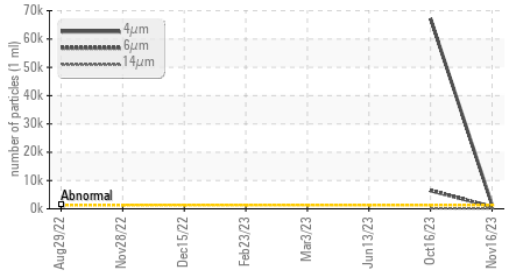
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**2918**	3032	4131
Sodium	ppm	ASTM D5185m		**4**	2	0
Potassium	ppm	ASTM D5185m	>20	**0**	0	1
Water	%	ASTM D6304		▲ **0.102**	0.012	0.032
ppm Water	ppm	ASTM D6304		▲ **1020**	122.1	325.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **1348**	▲ 67241	---
Particles >6µm		ASTM D7647	>320	▲ **735**	▲ 6446	---
Particles >14µm		ASTM D7647	>80	▲ **125**	▲ 177	---
Particles >21µm		ASTM D7647	>20	▲ **42**	▲ 54	---
Particles >38µm		ASTM D7647	>4	▲ **7**	3	---
Particles >71µm		ASTM D7647	>3	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **18/17/14**	▲ 23/20/15	---

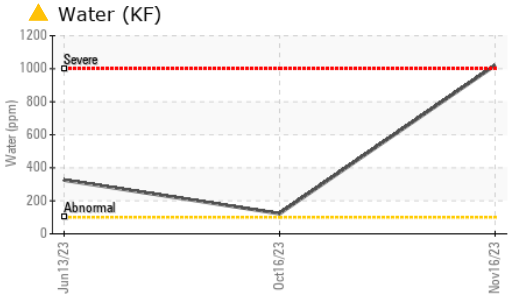
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.75**	0.63	0.87

OIL ANALYSIS REPORT

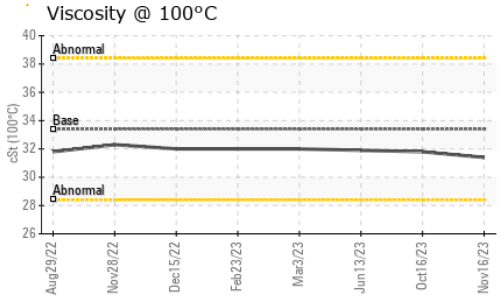
Particle Trend



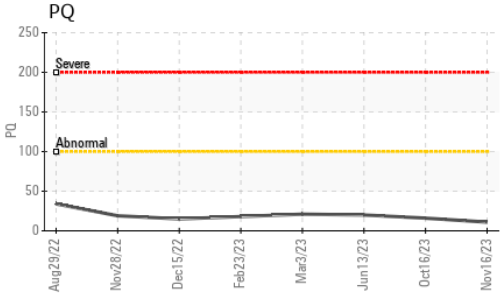
Water (KF)



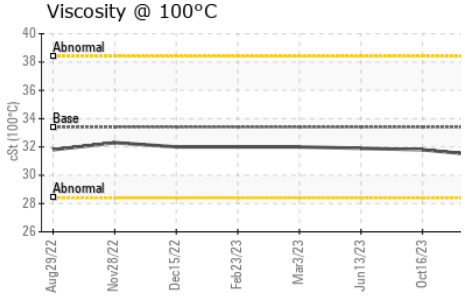
Viscosity @ 100°C



PQ

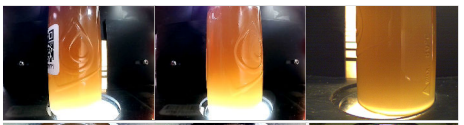


Viscosity @ 100°C



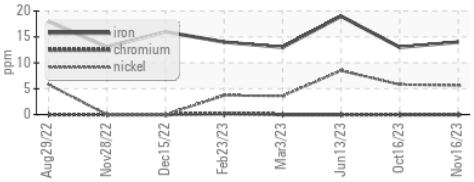
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	▲ MODER
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	▲ MODER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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	326	**322**	321	322
Visc @ 100°C	cSt	ASTM D445	33.4	**31.4**	31.8	31.9
Viscosity Index (VI)	Scale	ASTM D2270	145	**135**	138	138

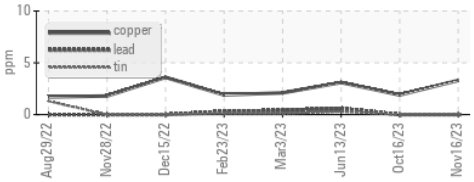
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

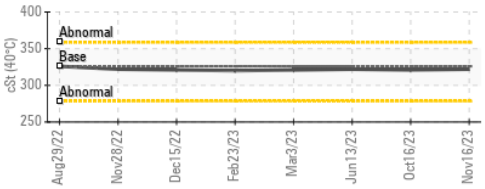
Ferrous Alloys



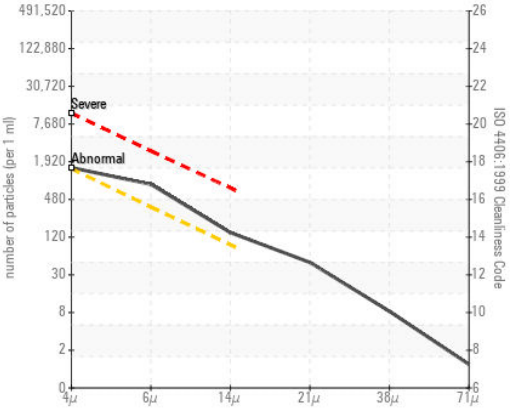
Non-ferrous Metals



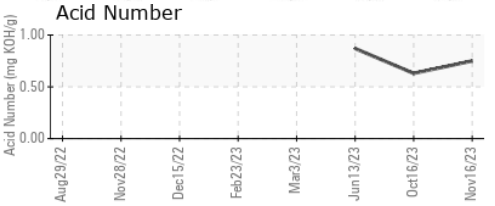
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001971 **Received** : 21 Nov 2023
Lab Number : 06014033 **Diagnosed** : 30 Nov 2023
Unique Number : 10753177 **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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Report Id: DARDALTX [WUSCAR] 06014033 (Generated: 11/30/2023 10:38:05) Rev: 1

Submitted By: YON PALOMINO