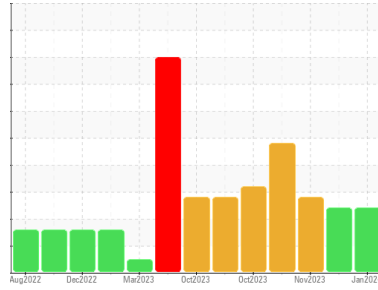


OIL ANALYSIS REPORT

Sample Rating Trend



Area
Paper Cup Machines
 Machine Id
PMC 1003 POS-426 (S/N 189471)
 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	TO50002007	TO50001956	TO50001991
Sample Date	Client Info	31 Jan 2024	29 Dec 2023	17 Nov 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Filtered	Filtered	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	17	20	13
Iron	ppm	9	11	11
Chromium	ppm	<1	<1	<1
Nickel	ppm	29	11	16
Titanium	ppm	<1	<1	<1
Silver	ppm	0	0	0
Aluminum	ppm	<1	1	2
Lead	ppm	1	0	<1
Copper	ppm	2	2	2
Tin	ppm	2	<1	<1
Vanadium	ppm	0	0	0
Cadmium	ppm	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	81	82	98
Barium	ppm	0	10	0
Molybdenum	ppm	0	<1	<1
Manganese	ppm	<1	0	<1
Magnesium	ppm	0	<1	<1
Calcium	ppm	0	38	3
Phosphorus	ppm	457	497	495
Zinc	ppm	0	5	0
Sulfur	ppm	6544	7705	7443

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	15178	8908	14651
Sodium	ppm	<1	0	0
Potassium	ppm	0	2	<1
Water	%	0.012	0.063	0.030
ppm Water	ppm	125	630	304

FLUID CLEANLINESS

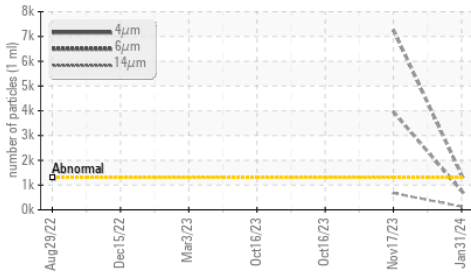
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	▲ 1401	---	▲ 7264
Particles >6µm	ASTM D7647	▲ 763	---	▲ 3957
Particles >14µm	ASTM D7647	▲ 130	---	▲ 673
Particles >21µm	ASTM D7647	▲ 44	---	▲ 227
Particles >38µm	ASTM D7647	▲ 7	---	▲ 35
Particles >71µm	ASTM D7647	▲ 1	---	▲ 4
Oil Cleanliness	ISO 4406 (c)	▲ 18/17/14	---	▲ 20/19/17

FLUID DEGRADATION

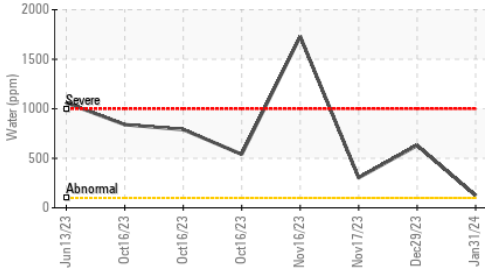
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	0.88	0.77	0.69

OIL ANALYSIS REPORT

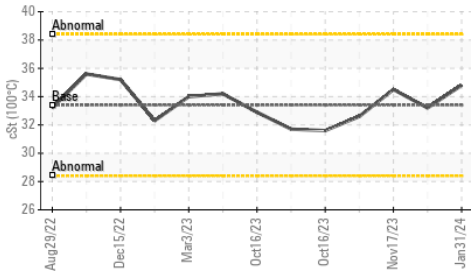
▲ Particle Trend



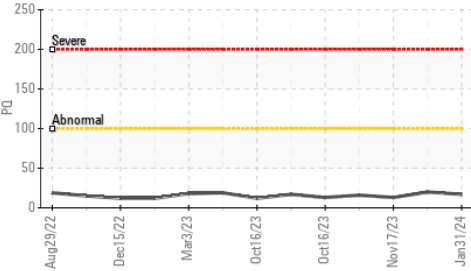
Water (KF)



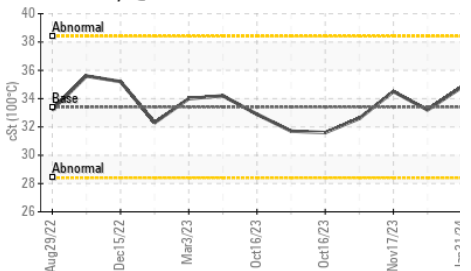
Viscosity @ 100°C



PQ



Viscosity @ 100°C

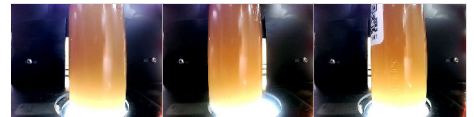


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	0.2%	NEG
Free Water	scalar	*Visual	NEG	▲ 10.0	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	326	345	334
Visc @ 100°C	cSt	ASTM D445	33.4	34.8	33.2
Viscosity Index (VI)	Scale	ASTM D2270	145	144	140

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

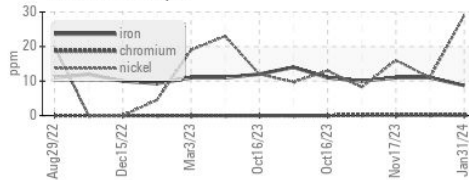


Bottom

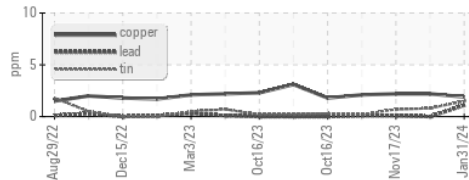


GRAPHS

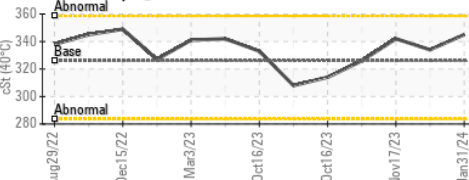
Ferrous Alloys



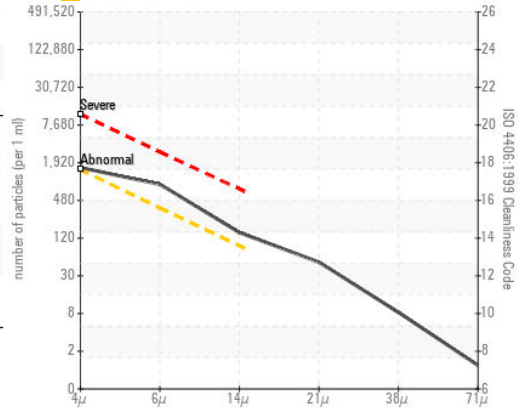
Non-ferrous Metals



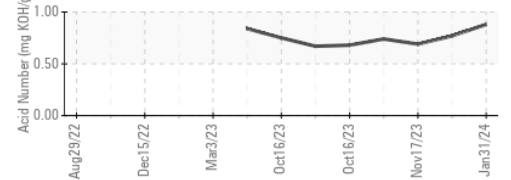
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002007 **Received** : 01 Feb 2024
Lab Number : 06076837 **Tested** : 07 Feb 2024
Unique Number : 10858928 **Diagnosed** : 07 Feb 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)

DART CONTAINER CORPORATION
 4444 W LEADBETTER DR
 DALLAS, TX
 US 75236
 Contact: YON PALOMINO
 yon.palomino@dart.biz
 T: (214)775-5673
 F:

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)