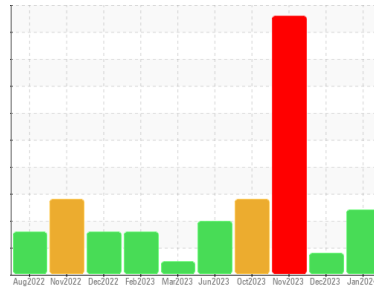


OIL ANALYSIS REPORT

Sample Rating Trend



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 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	TO50001954	TO50001947	TO50001971
Sample Date	Client Info	26 Jan 2024	29 Dec 2023	16 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	SEVERE

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	21	17	11
Iron	ppm	11	13	14
Chromium	ppm	<1	<1	0
Nickel	ppm	6	5	6
Titanium	ppm	<1	<1	0
Silver	ppm	0	0	0
Aluminum	ppm	<1	1	0
Lead	ppm	<1	<1	0
Copper	ppm	2	2	3
Tin	ppm	<1	<1	0
Vanadium	ppm	0	0	<1
Cadmium	ppm	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	86	87	92
Barium	ppm	0	10	0
Molybdenum	ppm	0	0	0
Manganese	ppm	<1	0	<1
Magnesium	ppm	0	<1	0
Calcium	ppm	0	4	56
Phosphorus	ppm	485	515	461
Zinc	ppm	0	0	2
Sulfur	ppm	6994	8515	6808

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	3176	3565	2918
Sodium	ppm	2	0	4
Potassium	ppm	0	1	0
Water	%	0.020	0.013	▲ 0.102
ppm Water	ppm	201	132	▲ 1020

FLUID CLEANLINESS

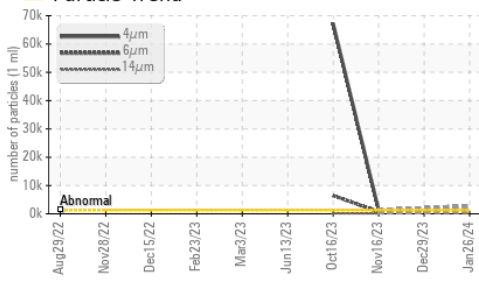
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	▲ 2871	---	▲ 1348
Particles >6µm	ASTM D7647	▲ 1564	---	▲ 735
Particles >14µm	ASTM D7647	▲ 266	---	▲ 125
Particles >21µm	ASTM D7647	▲ 90	---	▲ 42
Particles >38µm	ASTM D7647	▲ 14	---	▲ 7
Particles >71µm	ASTM D7647	1	---	1
Oil Cleanliness	ISO 4406 (c)	▲ 19/18/15	---	▲ 18/17/14

FLUID DEGRADATION

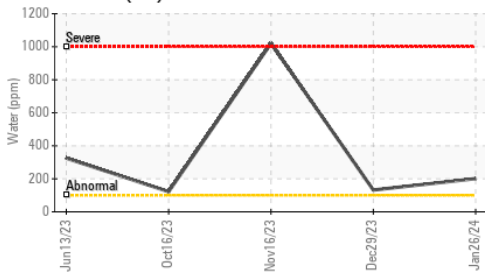
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	0.93	0.80	0.75

OIL ANALYSIS REPORT

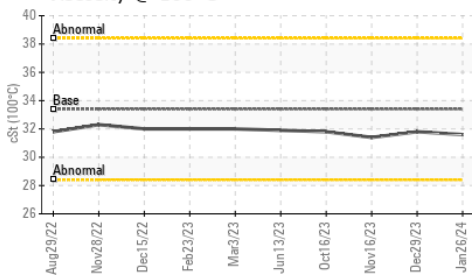
▲ Particle Trend



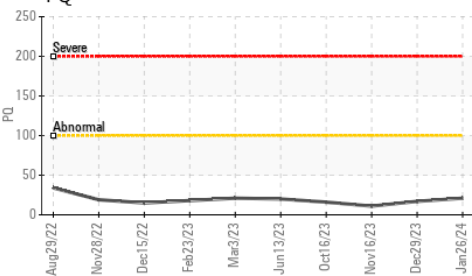
Water (KF)



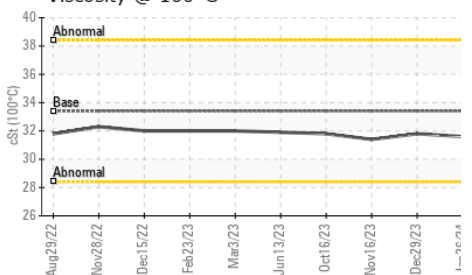
Viscosity @ 100°C



PQ



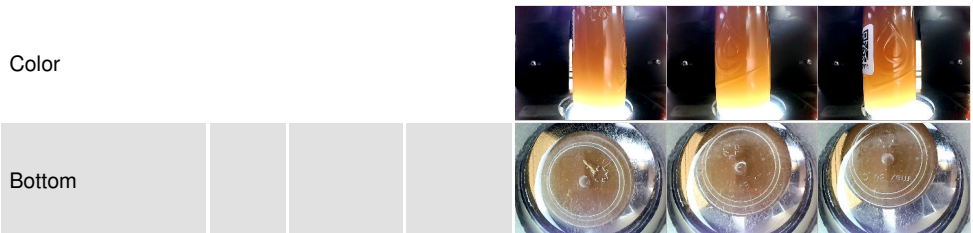
Viscosity @ 100°C



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	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	▲ 0.2%
Free Water	scalar	*Visual	NEG	NEG	● 1.0

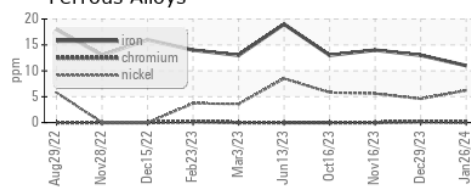
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	326	314	322
Visc @ 100°C	cSt	ASTM D445	33.4	31.8	31.4
Viscosity Index (VI)	Scale	ASTM D2270	145	140	135

SAMPLE IMAGES

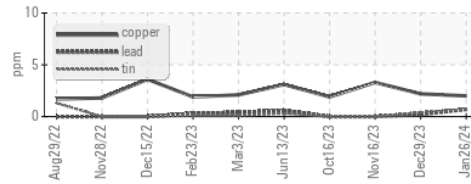


GRAPHS

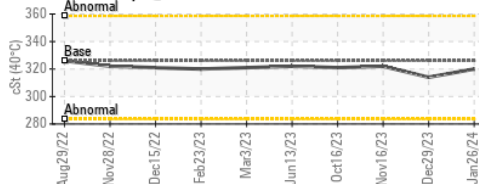
Ferrous Alloys



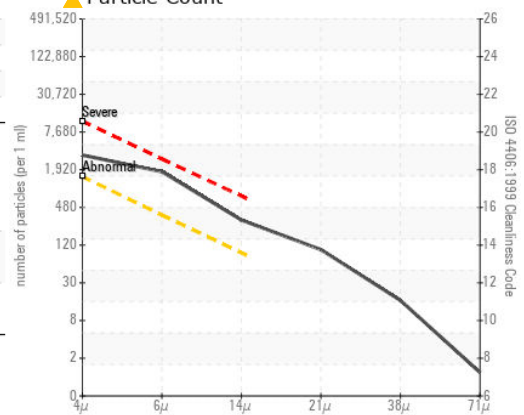
Non-ferrous Metals



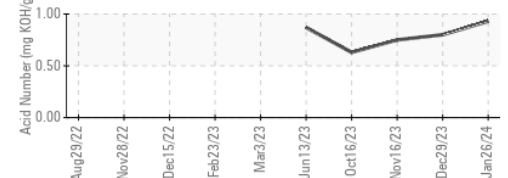
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001954 **Received** : 01 Feb 2024
Lab Number : 06076841 **Tested** : 07 Feb 2024
Unique Number : 10858932 **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)