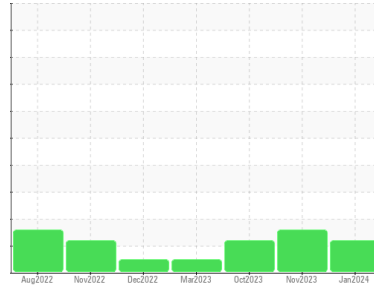


OIL ANALYSIS REPORT

Sample Rating Trend



Area
Paper Cup Machines
 Machine Id
PMC 1003 POS-437 (S/N 199302)
 Component
Circulating System
 Fluid
SUMMIT Syngear SH-1032 320 (85 GAL)

DIAGNOSIS

- Recommendation**
 No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
 All component wear rates are normal.
- Contamination**
 There is a high amount of silt (particulates < 14 microns in size) present in the oil.
- Fluid Condition**
 The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	TO50001951	TO50001972	TO50001170
Sample Date	Client Info	21 Jan 2024	16 Nov 2023	16 Oct 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Chngd	Not Chngd	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	17	16	13	
Iron	ppm	ASTM D5185m	3	11	10
Chromium	ppm	ASTM D5185m	0	<1	0
Nickel	ppm	ASTM D5185m	0	6	7
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	0	2	<1
Lead	ppm	ASTM D5185m	0	<1	0
Copper	ppm	ASTM D5185m	3	2	2
Tin	ppm	ASTM D5185m	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	68	91	89
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	<1	<1	0
Calcium	ppm	ASTM D5185m	45	4	0
Phosphorus	ppm	ASTM D5185m	438	493	516
Zinc	ppm	ASTM D5185m	8	0	0
Sulfur	ppm	ASTM D5185m	6126	8085	8232

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	3421	4454	3888
Sodium	ppm	ASTM D5185m	0	<1	<1
Potassium	ppm	ASTM D5185m	>20	1	0
Water	%	ASTM D6304	0.021	0.018	0.015
ppm Water	ppm	ASTM D6304	216	180	156.3

FLUID CLEANLINESS

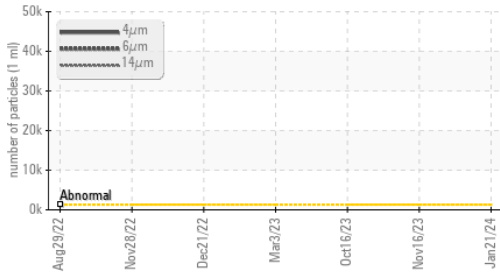
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>1300	▲ 44518	---	---
Particles >6µm	ASTM D7647	>320	▲ 3795	---	---
Particles >14µm	ASTM D7647	>80	60	---	---
Particles >21µm	ASTM D7647	>20	12	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ 23/19/13	---	---

FLUID DEGRADATION

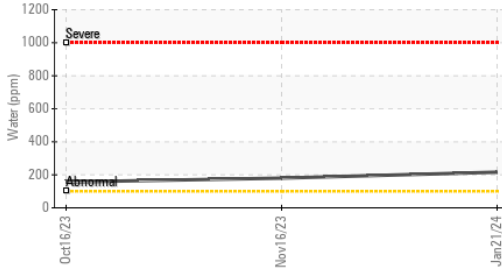
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.68	0.73	0.76

OIL ANALYSIS REPORT

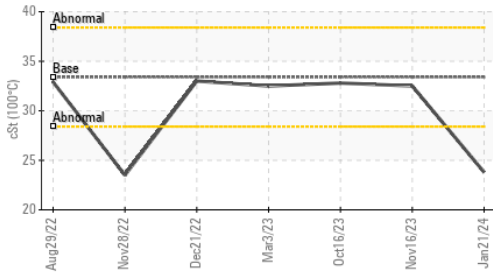
▲ Particle Trend



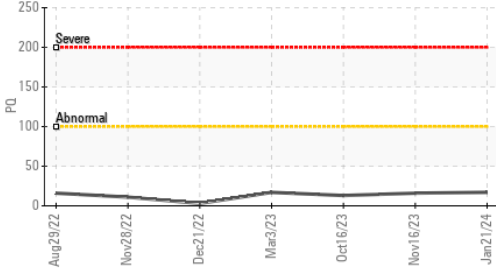
Water (KF)



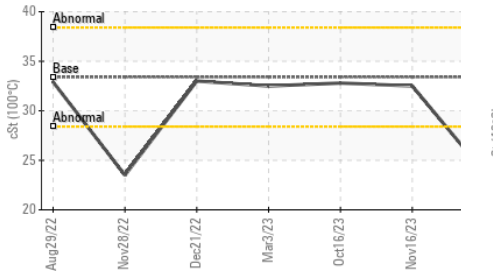
Viscosity @ 100°C



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	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	326	317	330
Visc @ 100°C	cSt	ASTM D445	33.4	23.8	32.5
Viscosity Index (VI)	Scale	ASTM D2270	145	94	138

SAMPLE IMAGES

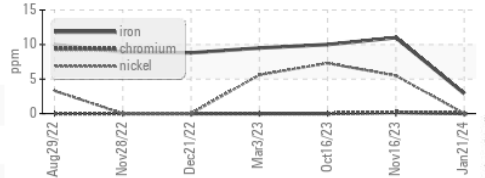
Color



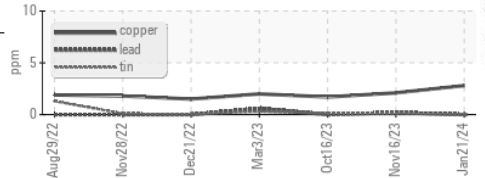
Bottom

GRAPHS

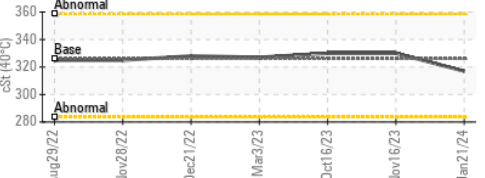
Ferrous Alloys



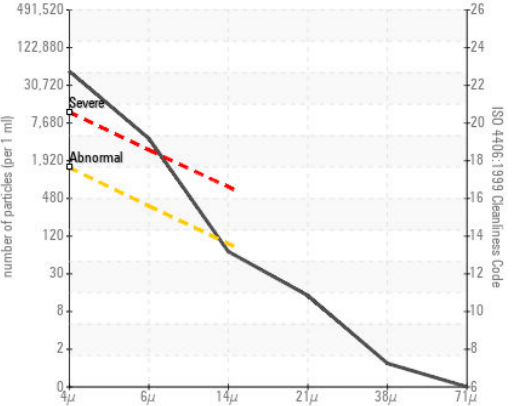
Non-ferrous Metals



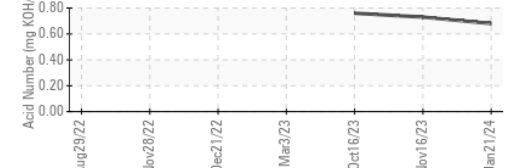
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001951 **Received** : 19 Jan 2024
Lab Number : 06065594 **Diagnosed** : 24 Jan 2024
Unique Number : 10836976 **Diagnostician** : Doug Bogart
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)