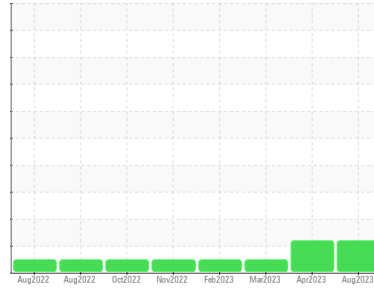


# PROBLEM SUMMARY

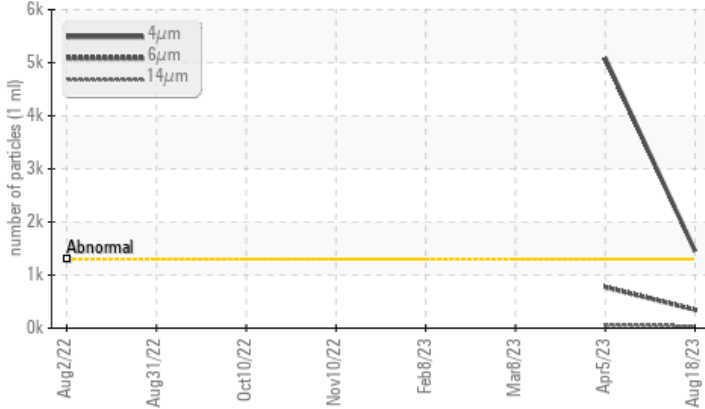
Area  
**Thermoforming**  
 Machine Id  
**Line 2 Extruder (S/N 266-29810-01-1)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**SUMMIT UNIPAR FG-320 (55 GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor. (Customer Sample Comment: Benjamin pastillo )

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>1300	▲ 1453	▲ 5084	---
Particles >6µm	ASTM D7647	>320	▲ 347	▲ 773	---
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ 18/16/12	▲ 20/17/13	---

Customer Id: DARDALTX  
 Sample No.: TO50001560  
 Lab Number: 05933508  
 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](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**05 Apr 2023 Diag: Angela Borella**

ISO



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

view report



**08 Mar 2023 Diag: Doug Bogart**

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



**08 Feb 2023 Diag: Sean Felton**

NORMAL

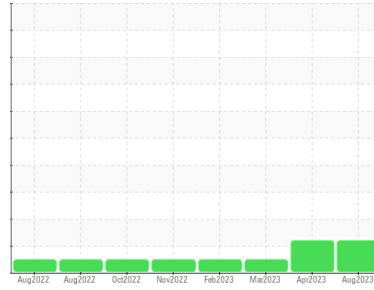


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



Area  
**Thermoforming**  
 Machine Id  
**Line 2 Extruder (S/N 266-29810-01-1)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**SUMMIT UNIPAR FG-320 (55 GAL)**



## DIAGNOSIS

**Recommendation**  
 No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Benjamin pastillo )

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is a moderate 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 suitable for further service.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>TO50001560</b>	TO50001635	TO50001353
Sample Date	Client Info		<b>18 Aug 2023</b>	05 Apr 2023	08 Mar 2023
Machine Age	hrs	Client Info	<b>1000</b>	1000	0
Oil Age	hrs	Client Info	<b>1000</b>	1000	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	ABNORMAL	NORMAL

WEAR METALS	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>17</b>	14	11
Iron	ppm	ASTM D5185m >150	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Phosphorus	ppm	ASTM D5185m	<b>488</b>	430	432
Zinc	ppm	ASTM D5185m	<b>2</b>	2	0
Sulfur	ppm	ASTM D5185m	<b>0</b>	185	107

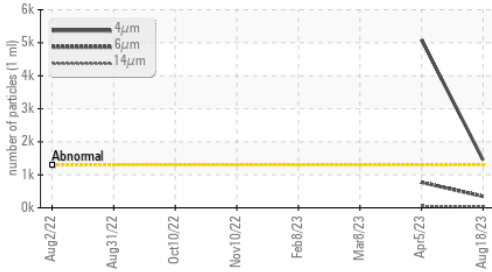
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>20</b>	26	20
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304 >0.1	<b>0.003</b>	0.007	---
ppm Water	ppm	ASTM D6304 >1000	<b>31.6</b>	70.3	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	<b>▲ 1453</b>	▲ 5084	---
Particles >6µm	ASTM D7647	>320	<b>▲ 347</b>	▲ 773	---
Particles >14µm	ASTM D7647	>80	<b>40</b>	54	---
Particles >21µm	ASTM D7647	>20	<b>11</b>	22	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	3	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>17/15/13	<b>▲ 18/16/12</b>	▲ 20/17/13	---

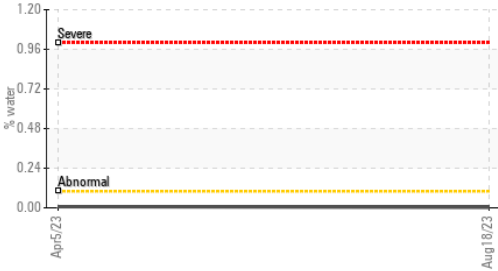
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.56</b>	0.59	---

# OIL ANALYSIS REPORT

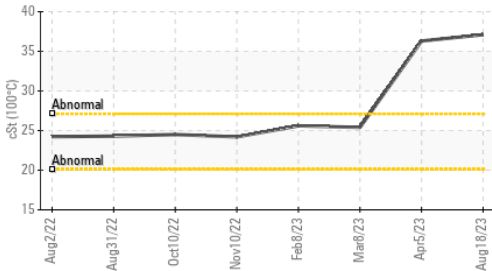
## Particle Trend



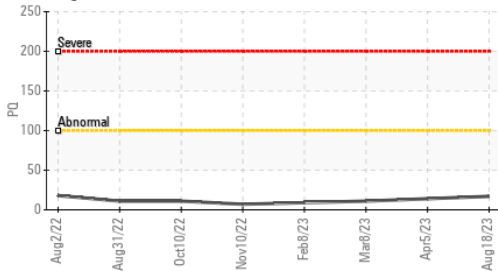
## Water



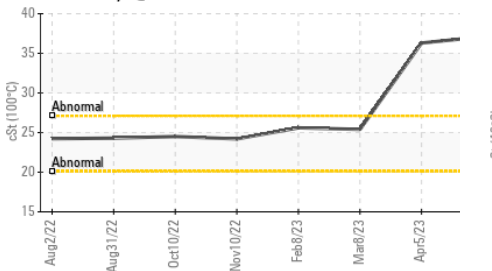
## Viscosity @ 100°C



## PQ



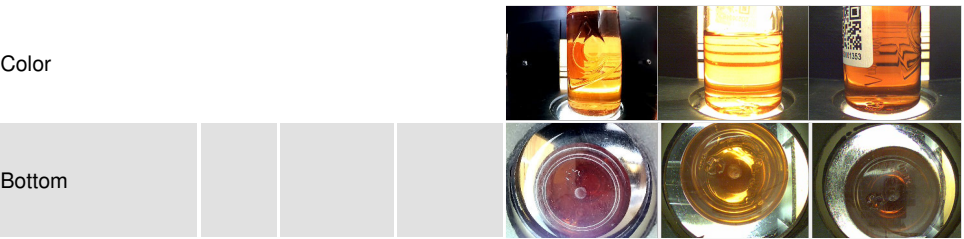
## Viscosity @ 100°C



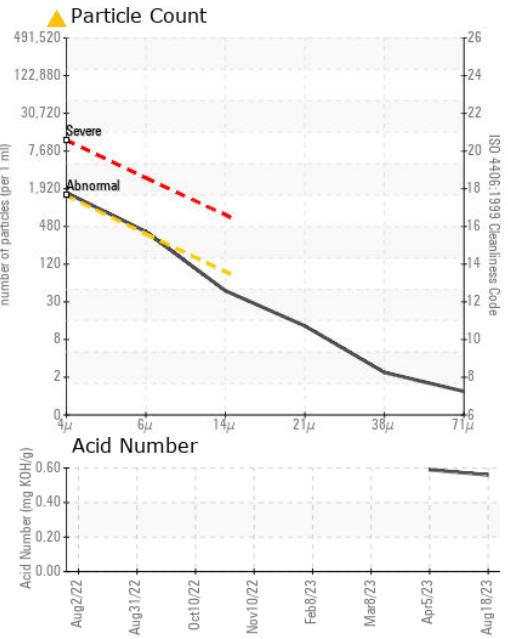
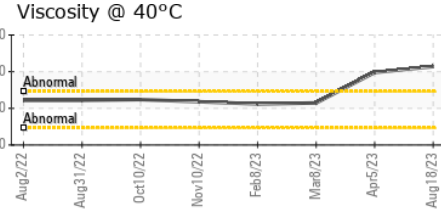
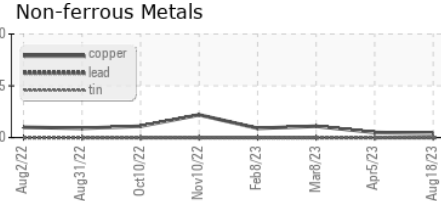
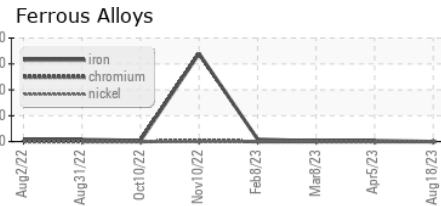
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	307	299	257.4
Visc @ 100°C	cSt	ASTM D445	37.1	36.3	25.4
Viscosity Index (VI)	Scale	ASTM D2270	170	169	126

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50001560 **Received** : 24 Aug 2023  
**Lab Number** : 05933508 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10618779 **Diagnostician** : 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)