

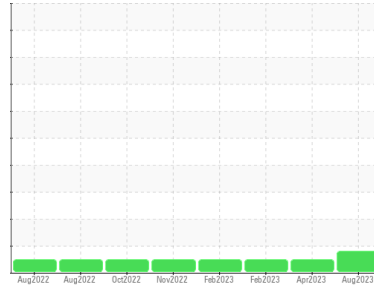
# PROBLEM SUMMARY

Sample Rating Trend

ISO

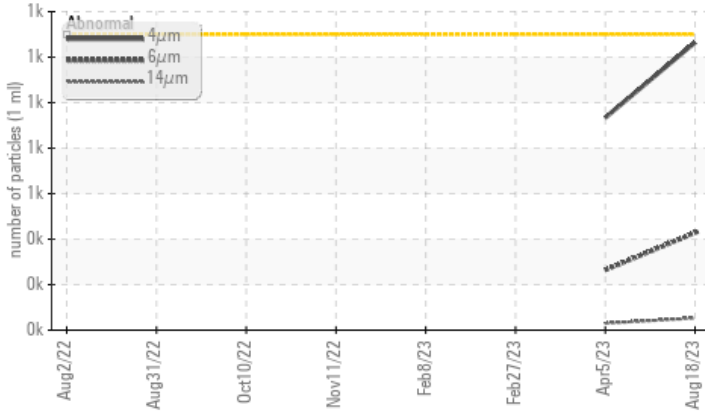


Area  
**Thermoforming**  
 Machine Id  
**Line 4 D Extruder (S/N X8143)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**NOT GIVEN (8 GAL)**



## 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: Beanjamin Castillo)

## PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	NORMAL	NORMAL
Particles >6µm	ASTM D7647 >320	▲ 428	264	---
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ 17/16/13	17/15/12	---

Customer Id: DARDALTX  
 Sample No.: TO50001566  
 Lab Number: 05933501  
 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

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 amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 27 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



### 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



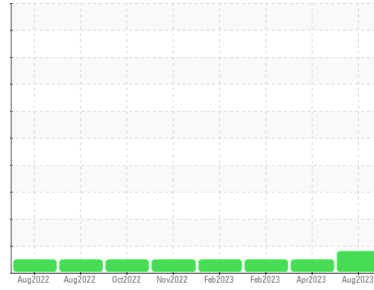
# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area  
**Thermoforming**  
 Machine Id  
**Line 4 D Extruder (S/N X8143)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**NOT GIVEN (8 GAL)**



## DIAGNOSIS

### Recommendation

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

### 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>TO50001566</b>	TO50001636	TO50001348
Sample Date	Client Info	<b>18 Aug 2023</b>	05 Apr 2023	27 Feb 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>12</b>	13	11
Iron	ppm	ASTM D5185m >150	<1	<1
Chromium	ppm	ASTM D5185m >10	0	0
Nickel	ppm	ASTM D5185m >10	0	0
Titanium	ppm	ASTM D5185m	0	<1
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >25	0	0
Lead	ppm	ASTM D5185m >100	0	0
Copper	ppm	ASTM D5185m >50	<1	<1
Tin	ppm	ASTM D5185m >10	0	0
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	2	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	0	<1
Magnesium	ppm	ASTM D5185m	<1	<1
Calcium	ppm	ASTM D5185m	0	2
Phosphorus	ppm	ASTM D5185m	615	548
Zinc	ppm	ASTM D5185m	4	4
Sulfur	ppm	ASTM D5185m	498	645

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	20	21
Sodium	ppm	ASTM D5185m	0	0
Potassium	ppm	ASTM D5185m >20	1	<1
Water	%	ASTM D6304 >0.1	0.005	0.002
ppm Water	ppm	ASTM D6304 >1000	54.0	19.6

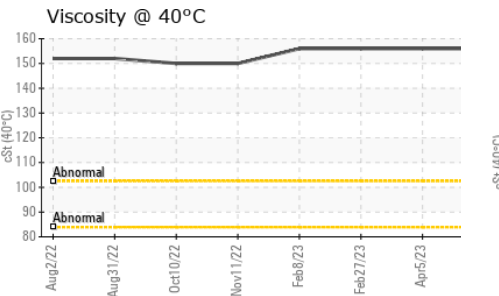
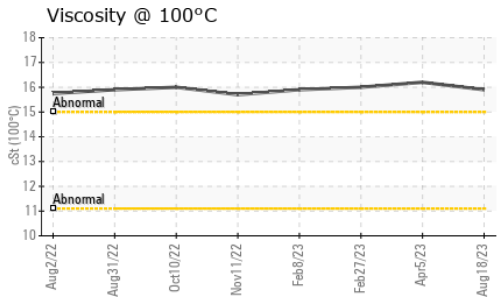
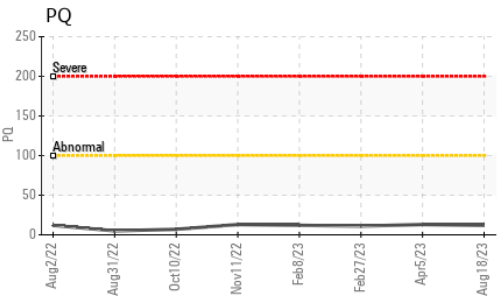
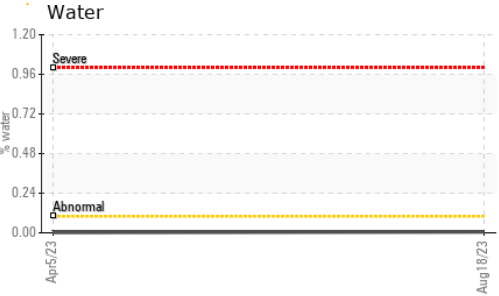
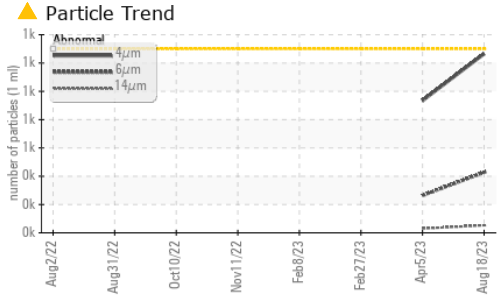
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	<b>1265</b>	934	---
Particles >6µm	ASTM D7647 >320	▲ <b>428</b>	264	---
Particles >14µm	ASTM D7647 >80	<b>53</b>	30	---
Particles >21µm	ASTM D7647 >20	<b>16</b>	11	---
Particles >38µm	ASTM D7647 >4	<b>2</b>	1	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ <b>17/16/13</b>	17/15/12	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.65</b>	0.49

# OIL ANALYSIS REPORT

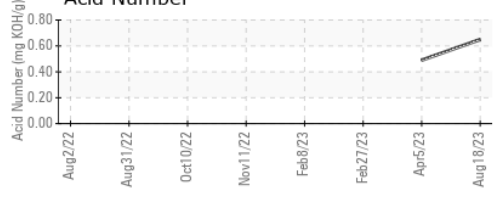
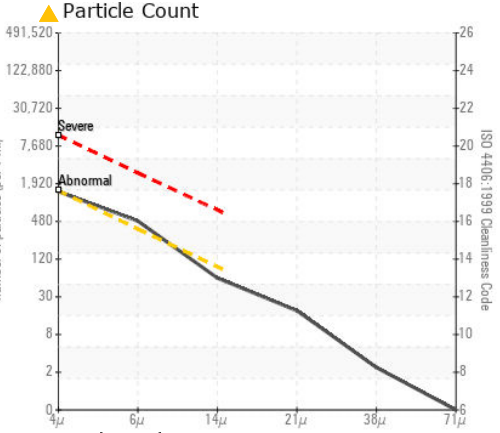
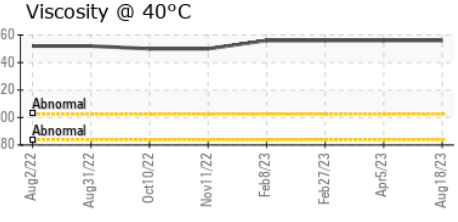
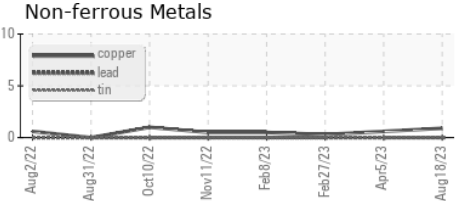
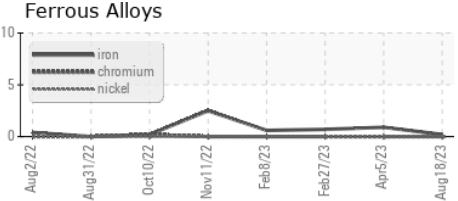


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	156	156	156
Visc @ 100°C	cSt	ASTM D445	15.9	16.2	16.0
Viscosity Index (VI)	Scale	ASTM D2270	105	108	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50001566 **Received** : 24 Aug 2023  
**Lab Number** : 05933501 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10618772 **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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