

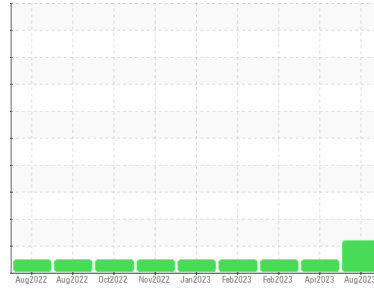
# PROBLEM SUMMARY

Sample Rating Trend

ISO

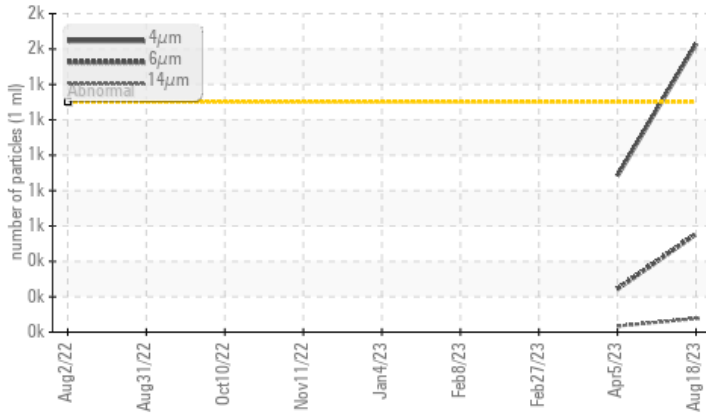


Area  
**Thermoforming**  
Machine Id  
**Line 4 C Extruder (S/N AJ213)**  
Component  
**Bevel Helical Gearbox**  
Fluid  
**NOT GIVEN (18 GAL)**



## 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: Benjamin Castillo )

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	NORMAL
Particles >4µm	ASTM D7647	>1300	▲ 1630	884	---
Particles >6µm	ASTM D7647	>320	▲ 555	245	---
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ 18/16/13	17/15/12	---

Customer Id: DARDALTX  
Sample No.: TO50001559  
Lab Number: 05933505  
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: 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 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

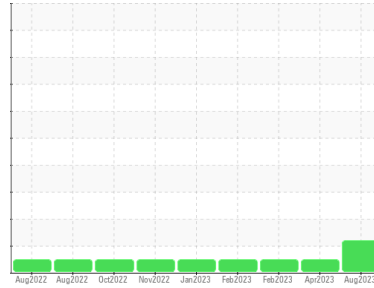


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



Area  
**Thermoforming**  
 Machine Id  
**Line 4 C Extruder (S/N AJ213)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**NOT GIVEN (18 GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Benjamin 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>TO50001559</b>	TO50001589	TO50001347
Sample Date	Client Info	<b>18 Aug 2023</b>	05 Apr 2023	27 Feb 2023
Machine Age	hrs Client Info	<b>0</b>	0	0
Oil Age	hrs Client Info	<b>0</b>	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>14</b>	7	11
Iron	ppm ASTM D5185m >150	<b>2</b>	3	1
Chromium	ppm ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >10	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	<1
Silver	ppm ASTM D5185m	<b>0</b>	0	0
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>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	0
Barium	ppm ASTM D5185m	<b>2</b>	1	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>0</b>	<1	1
Magnesium	ppm ASTM D5185m	<b>&lt;1</b>	0	6
Calcium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Phosphorus	ppm ASTM D5185m	<b>664</b>	661	588
Zinc	ppm ASTM D5185m	<b>6</b>	2	7
Sulfur	ppm ASTM D5185m	<b>535</b>	591	402

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>14</b>	6	4
Sodium	ppm ASTM D5185m	<b>0</b>	0	<1
Potassium	ppm ASTM D5185m >20	<b>&lt;1</b>	<1	0
Water	% ASTM D6304 >0.1	<b>0.006</b>	0.005	---
ppm Water	ppm ASTM D6304 >1000	<b>63.6</b>	58.5	---

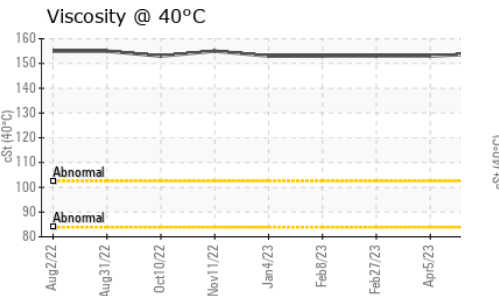
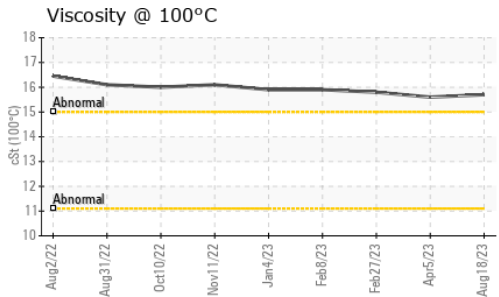
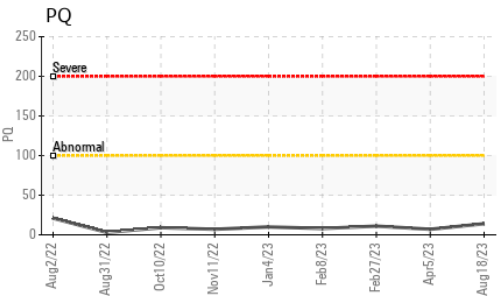
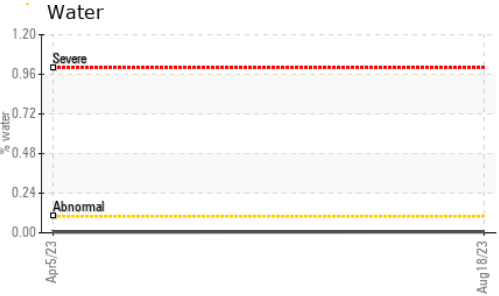
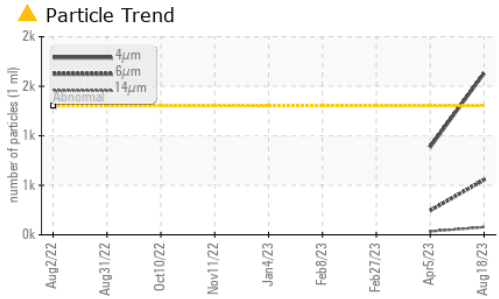
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	<b>▲ 1630</b>	884	---
Particles >6µm	ASTM D7647 >320	<b>▲ 555</b>	245	---
Particles >14µm	ASTM D7647 >80	<b>77</b>	34	---
Particles >21µm	ASTM D7647 >20	<b>25</b>	14	---
Particles >38µm	ASTM D7647 >4	<b>1</b>	1	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >17/15/13	<b>▲ 18/16/13</b>	17/15/12	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.74</b>	0.75	---

# OIL ANALYSIS REPORT

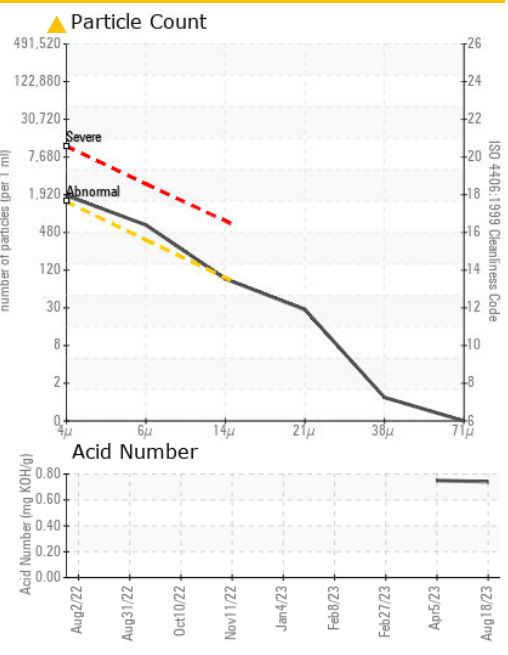
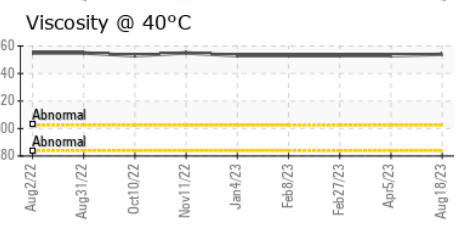
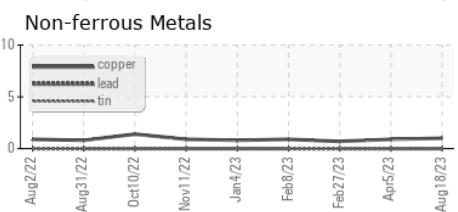
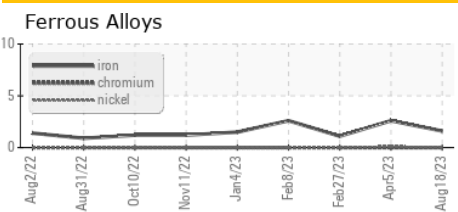


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	154	153	153
Visc @ 100°C	cSt	ASTM D445	15.7	15.6	15.8
Viscosity Index (VI)	Scale	ASTM D2270	104	104	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50001559 **Received** : 24 Aug 2023  
**Lab Number** : 05933505 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10618776 **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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