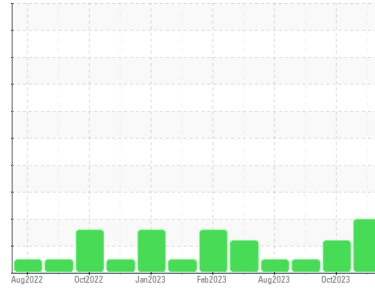


# PROBLEM SUMMARY

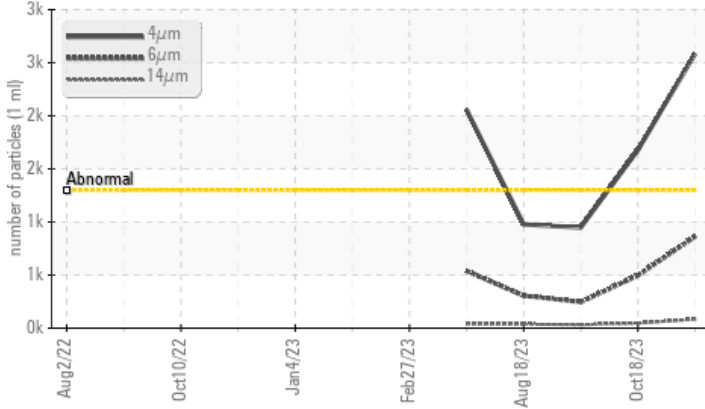
Sample Rating Trend



Area  
**Thermoforming**  
Machine Id  
**Line 10 B Extruder (S/N X8192)**  
Component  
**Bevel Helical Gearbox**  
Fluid  
**SUMMIT UNIPAR FG-150 (8 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ATTENTION	NORMAL
Particles >4µm	ASTM D7647	>1300	▲ <b>2583</b>	▲ 1678	947
Particles >6µm	ASTM D7647	>320	▲ <b>863</b>	▲ 497	246
Particles >14µm	ASTM D7647	>80	▲ <b>85</b>	47	32
Particles >21µm	ASTM D7647	>20	▲ <b>28</b>	13	12
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ <b>19/17/14</b>	▲ 18/16/13	17/15/12

Customer Id: DARDALTX  
Sample No.: TO50001533  
Lab Number: 06013253  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

## HISTORICAL DIAGNOSIS

### 18 Oct 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 moderate 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 suitable for further service.

view report



### 13 Sep 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



### 18 Aug 2023 Diag: Jonathan Hester

NORMAL

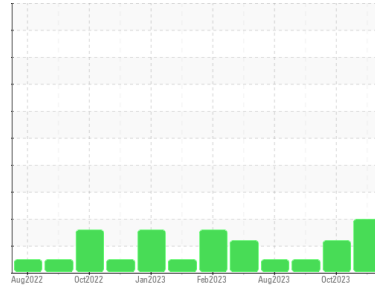


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area  
**Thermoforming**  
 Machine Id  
**Line 10 B Extruder (S/N X8192)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**SUMMIT UNIPAR FG-150 (8 GAL)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. 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	<b>TO50001533</b>	TO50001622	TO50001701
Sample Date	Client Info	<b>15 Nov 2023</b>	18 Oct 2023	13 Sep 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>Not Changed</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

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

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0
Barium	ppm	ASTM D5185m	<b>0</b>	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	3
Calcium	ppm	ASTM D5185m	<b>2</b>	2
Phosphorus	ppm	ASTM D5185m	<b>673</b>	635
Zinc	ppm	ASTM D5185m	<b>0</b>	0
Sulfur	ppm	ASTM D5185m	<b>645</b>	642

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>12</b>	16
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1
Water	%	ASTM D6304 >0.1	<b>0.002</b>	0.004
ppm Water	ppm	ASTM D6304 >1000	<b>22.3</b>	42.7

## FLUID CLEANLINESS

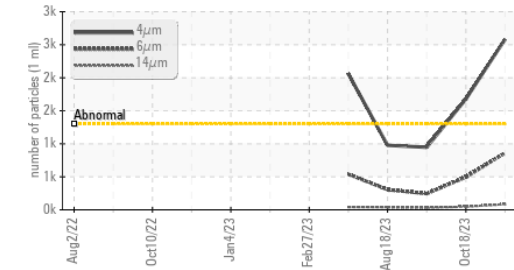
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	<b>▲ 2583</b>	▲ 1678	947
Particles >6µm	ASTM D7647 >320	<b>▲ 863</b>	▲ 497	246
Particles >14µm	ASTM D7647 >80	<b>▲ 85</b>	47	32
Particles >21µm	ASTM D7647 >20	<b>▲ 28</b>	13	12
Particles >38µm	ASTM D7647 >4	<b>2</b>	0	2
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c) >17/15/13	<b>▲ 19/17/14</b>	▲ 18/16/13	17/15/12

## FLUID DEGRADATION

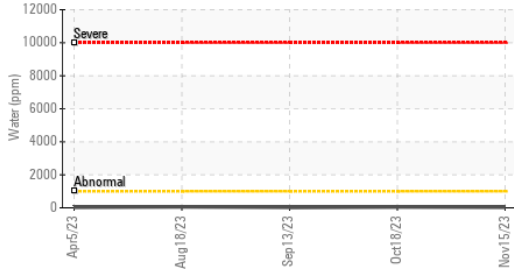
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.65</b>	0.72
				0.71

# OIL ANALYSIS REPORT

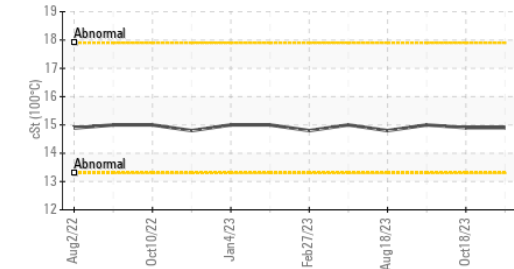
## ▲ Particle Trend



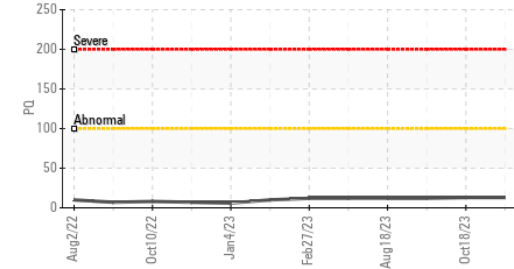
## Water (KF)



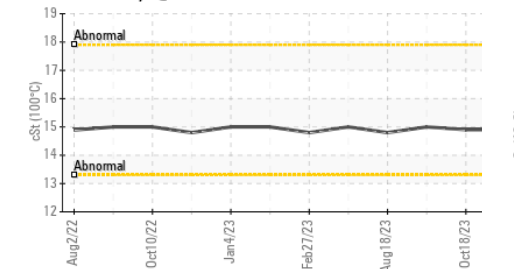
## Viscosity @ 100°C



## PQ



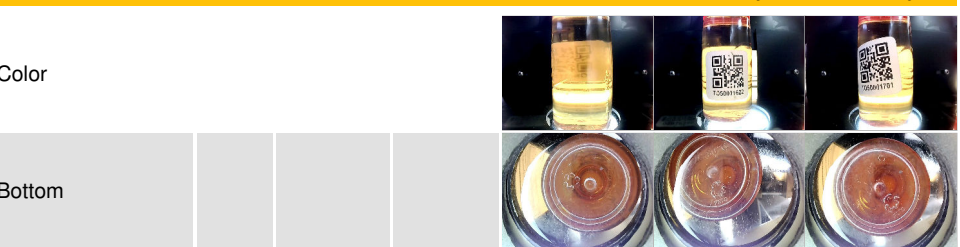
## Viscosity @ 100°C



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	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

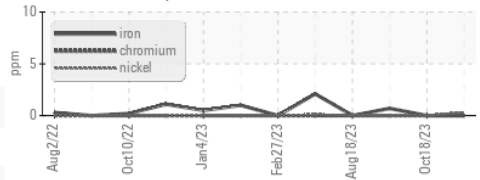
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	144	142	144
Visc @ 100°C	cSt	ASTM D445	14.9	14.9	15.0
Viscosity Index (VI)	Scale	ASTM D2270	103	105	104

## SAMPLE IMAGES

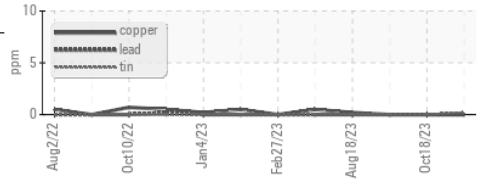


## GRAPHS

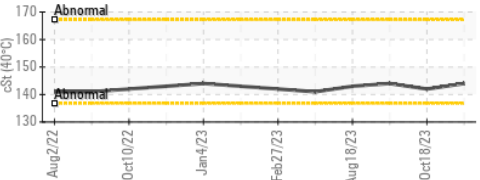
### Ferrous Alloys



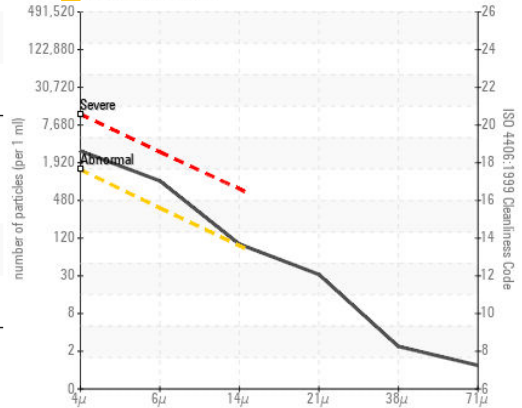
### Non-ferrous Metals



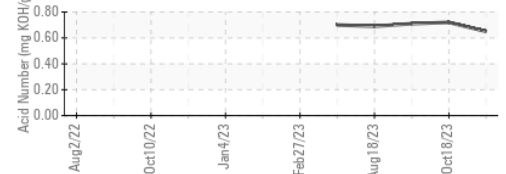
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50001533 **Received** : 20 Nov 2023  
**Lab Number** : 06013253 **Diagnosed** : 22 Nov 2023  
**Unique Number** : 10752397 **Diagnostician** : Don Baldrige

**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)

### DART CONTAINER CORPORATION

4444 W LEADBETTER DR  
DALLAS, TX  
US 75236

Contact: YON PALOMINO  
yon.palomino@dart.biz

T: (214)775-5673

F: