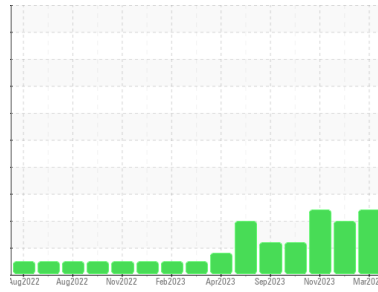


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**Thermoforming**  
 Machine Id  
**Line 3 C Extruder (S/N X8257)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**{not provided} (18 GAL)**

**DIAGNOSIS**

**Recommendation**

The oil filtered at the time of sampling has been noted. 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 moderate 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>TO50002231</b>	TO50002186	TO50001974
Sample Date	Client Info			<b>29 Mar 2024</b>	29 Feb 2024	15 Nov 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>Filtered</b>	Not Changd	Not Changd
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>13</b>	14	8
Iron	ppm	ASTM D5185m	>150	<b>8</b>	16	8
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	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	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	0
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185m	>50	<b>3</b>	8	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

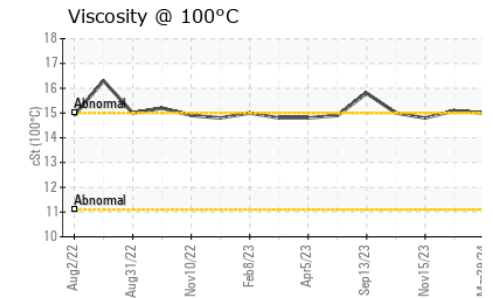
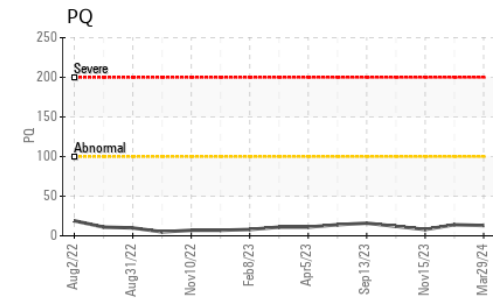
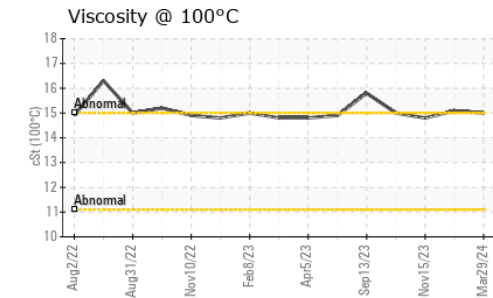
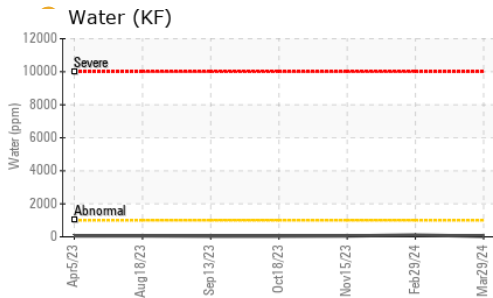
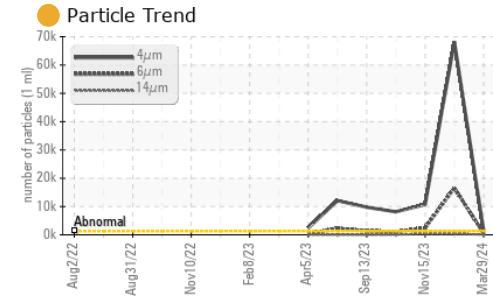
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m		<b>4</b>	0	2
Phosphorus	ppm	ASTM D5185m		<b>638</b>	904	573
Zinc	ppm	ASTM D5185m		<b>14</b>	19	6
Sulfur	ppm	ASTM D5185m		<b>738</b>	1091	641

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>46</b>	21	12
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	3	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	>0.1	<b>0.003</b>	0.011	0.005
ppm Water	ppm	ASTM D6304	>1000	<b>30</b>	110	50.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	<b>1533</b>	68153	10733
Particles >6µm		ASTM D7647	>320	<b>536</b>	16565	2474
Particles >14µm		ASTM D7647	>80	<b>110</b>	300	331
Particles >21µm		ASTM D7647	>20	<b>57</b>	39	140
Particles >38µm		ASTM D7647	>4	<b>10</b>	2	14
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>17/15/13	<b>18/16/14</b>	23/21/15	21/18/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.77</b>	0.78	0.66

# 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	146	145	144
Visc @ 100°C	cSt	ASTM D445	15.0	15.09	14.8
Viscosity Index (VI)	Scale	ASTM D2270	102	104	102

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS	
<p><b>Ferrous Alloys</b></p> <p><b>Non-ferrous Metals</b></p> <p><b>Viscosity @ 40°C</b></p>	<p><b>Particle Count</b></p> <p><b>Acid Number</b></p>



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50002231  
**Lab Number** : 06137403  
**Unique Number** : 10956868  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PQ, PrtCount, VI )

**DART CONTAINER CORPORATION**  
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 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)