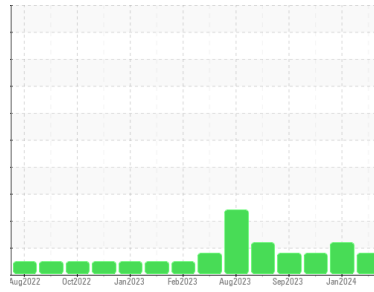


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**Thermoforming**  
 Machine Id  
**Line 7 Extruder (S/N 15547)**  
 Component  
**Bull Gear**  
 Fluid  
**{not provided} (54 GAL)**

**DIAGNOSIS**

**Recommendation**

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 silt (particulates < 6 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>TO50002234</b>	TO50001537	TO50001610
Sample Date	Client Info			<b>29 Mar 2024</b>	11 Jan 2024	17 Oct 2023
Machine Age	hrs	Client Info		<b>0</b>	24	24
Oil Age	hrs	Client Info		<b>0</b>	24	24
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>15</b>	14	16
Iron	ppm	ASTM D5185m	>150	<b>3</b>	6	4
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	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	2
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

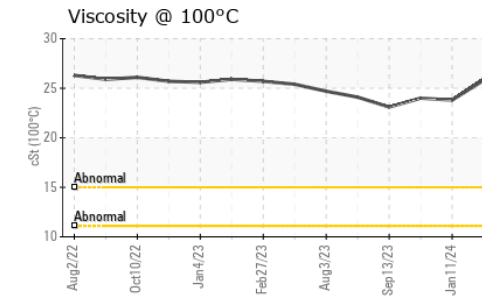
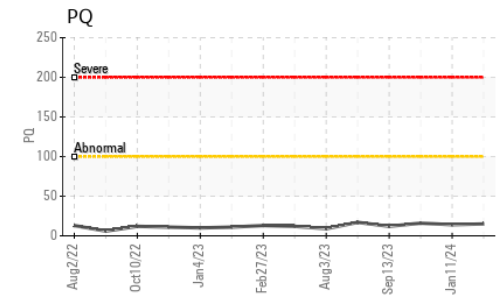
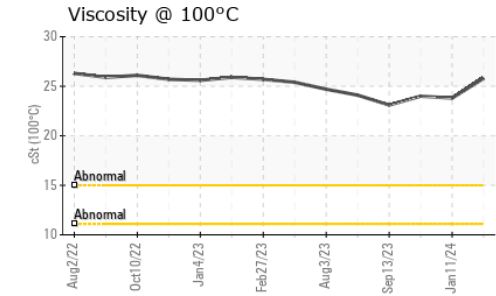
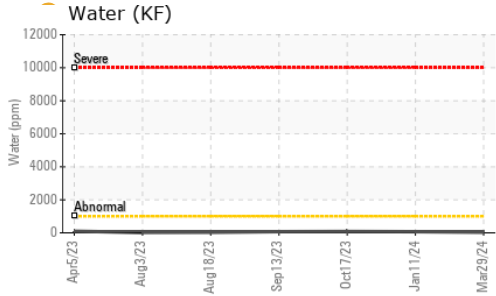
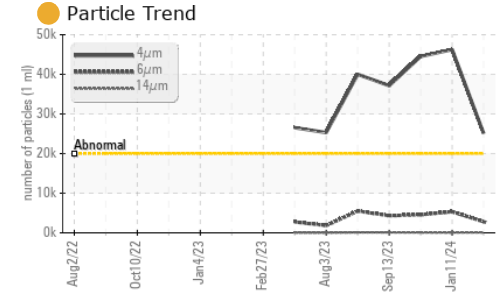
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>6</b>	16	13
Barium	ppm	ASTM D5185m		<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>1</b>	0	0
Calcium	ppm	ASTM D5185m		<b>7</b>	4	6
Phosphorus	ppm	ASTM D5185m		<b>387</b>	631	615
Zinc	ppm	ASTM D5185m		<b>5</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>1586</b>	3301	2944

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>30</b>	19	21
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>0.003</b>	0.006	0.008
ppm Water	ppm	ASTM D6304	>1000	<b>31</b>	68	82.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>25120</b>	46257	44522
Particles >6µm		ASTM D7647	>5000	<b>2805</b>	5339	4564
Particles >14µm		ASTM D7647	>640	<b>80</b>	48	70
Particles >21µm		ASTM D7647	>160	<b>33</b>	8	15
Particles >38µm		ASTM D7647	>40	<b>2</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>22/19/13</b>	23/20/13	23/19/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.68</b>	0.74	0.79

# OIL ANALYSIS REPORT

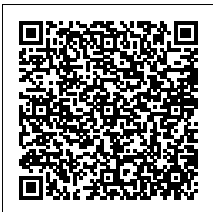


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	279	264	261
Visc @ 100°C	cSt	ASTM D445	25.8	23.8	24.0
Viscosity Index (VI)	Scale	ASTM D2270	119	112	115

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS	



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50002234 **Received** : 03 Apr 2024  
**Lab Number** : 06137400 **Tested** : 04 Apr 2024  
**Unique Number** : 10956865 **Diagnosed** : 05 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PQ, PrtCount, VI )

**DART CONTAINER CORPORATION**  
 4444 W LEADBETTER DR  
 DALLAS, TX 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)