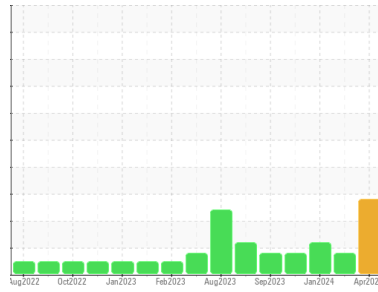


OIL ANALYSIS REPORT

Sample Rating Trend



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 high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal.

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		TO50002278	TO50002234	TO50001537
Sample Date	Client Info		17 Apr 2024	29 Mar 2024	11 Jan 2024
Machine Age	hrs	Client Info	0	0	24
Oil Age	hrs	Client Info	0	0	24
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS	method	limit/base	current	history1	history2
PQ	ASTM D8184		34	15	14
Iron	ppm	ASTM D5185m >150	26	3	6
Chromium	ppm	ASTM D5185m >10	0	<1	<1
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	2
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >50	2	<1	<1
Tin	ppm	ASTM D5185m >10	0	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

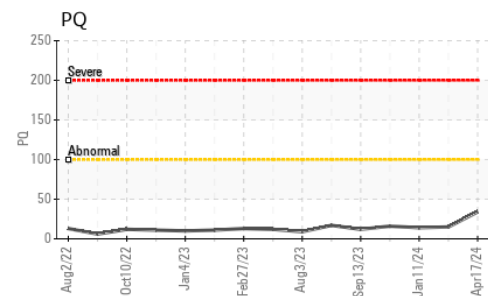
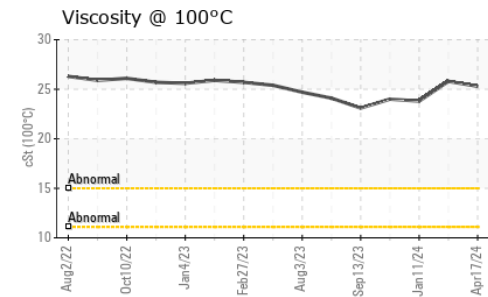
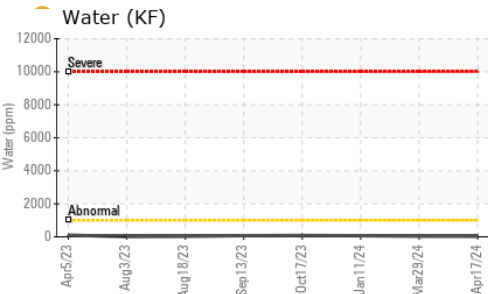
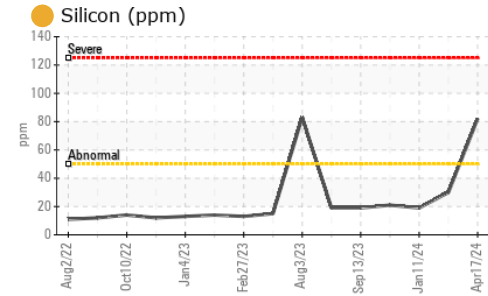
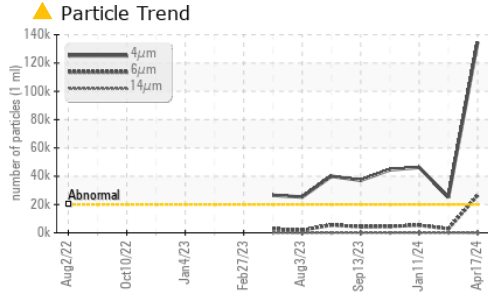
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	6	16
Barium	ppm	ASTM D5185m	0	0	3
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	<1	1	0
Calcium	ppm	ASTM D5185m	49	7	4
Phosphorus	ppm	ASTM D5185m	443	387	631
Zinc	ppm	ASTM D5185m	10	5	0
Sulfur	ppm	ASTM D5185m	888	1586	3301

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	82	30	19
Sodium	ppm	ASTM D5185m	0	0	0
Potassium	ppm	ASTM D5185m >20	0	<1	<1
Water	%	ASTM D6304 >0.1	0.002	0.003	0.006
ppm Water	ppm	ASTM D6304 >1000	19	31	68

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	134674	25120	46257
Particles >6µm	ASTM D7647	>5000	26417	2805	5339
Particles >14µm	ASTM D7647	>640	19	80	48
Particles >21µm	ASTM D7647	>160	6	33	8
Particles >38µm	ASTM D7647	>40	1	2	1
Particles >71µm	ASTM D7647	>10	0	1	1
Oil Cleanliness	ISO 4406 (c)	>21/19/16	24/22/11	22/19/13	23/20/13

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.73	0.68	0.74

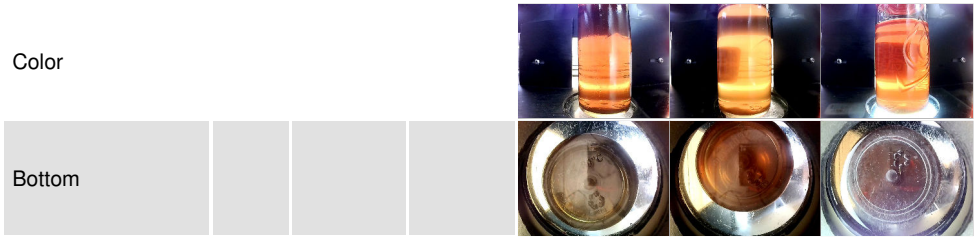
OIL ANALYSIS REPORT



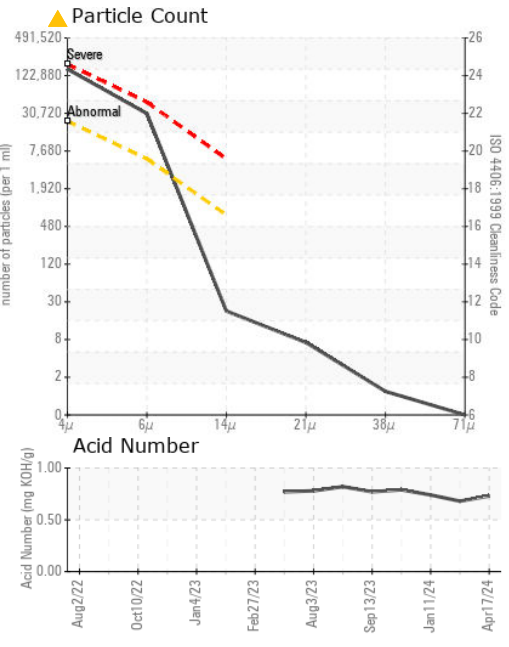
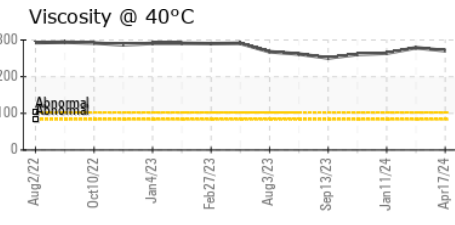
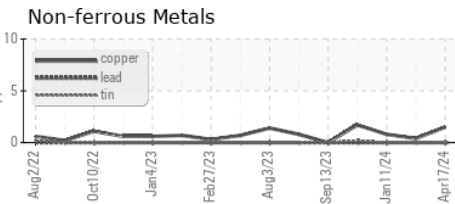
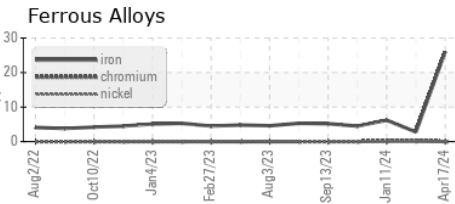
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	271	279	264
Visc @ 100°C	cSt	ASTM D445	25.3	25.8	23.8
Viscosity Index (VI)	Scale	ASTM D2270	119	119	112

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002278 **Received** : 22 Apr 2024
Lab Number : 06155938 **Tested** : 23 Apr 2024
Unique Number : 10991361 **Diagnosed** : 24 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)

DART CONTAINER CORPORATION
 4444 W LEADBETTER DR
 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)