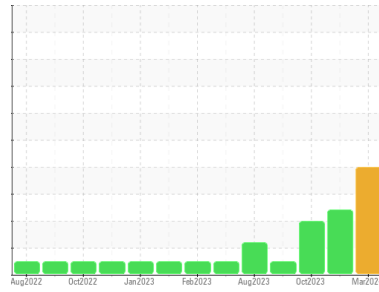


# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**Thermoforming**  
 Machine Id  
**Line 4 C Extruder (S/N AJ213)**  
 Component  
**Bevel Helical Gearbox**  
 Fluid  
**{not provided} (18 GAL)**

## DIAGNOSIS

**Recommendation**  
 We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

**Fluid Condition**  
 The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO50002228</b>	TO50002177	TO50001621
Sample Date	Client Info			<b>29 Mar 2024</b>	29 Feb 2024	18 Oct 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 Chngd	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>12</b>	14	6
Iron	ppm	ASTM D5185m	>150	<b>3</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
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	0
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

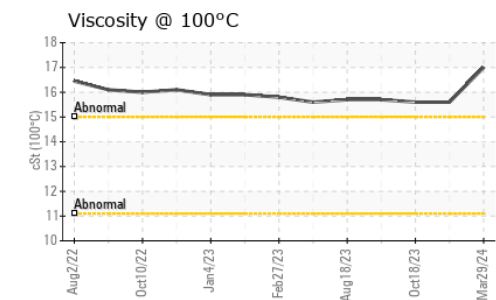
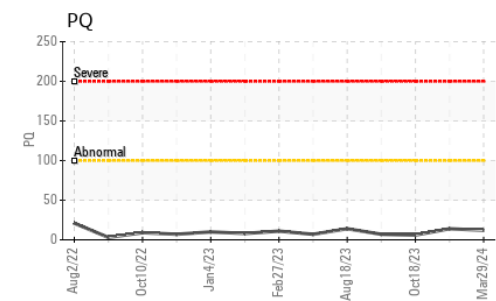
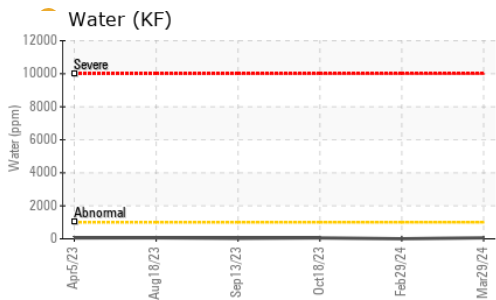
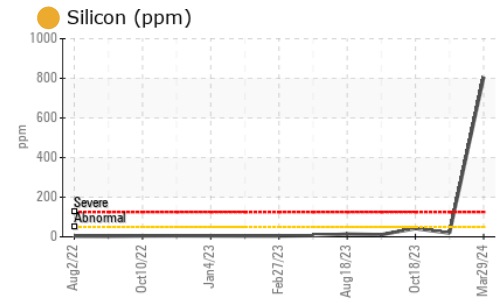
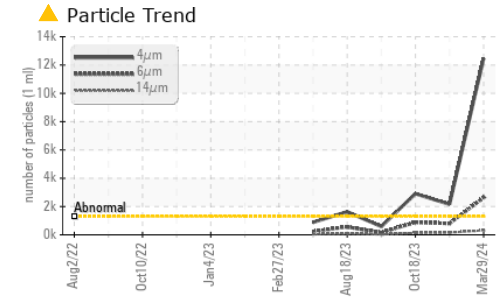
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>3</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	3
Calcium	ppm	ASTM D5185m		<b>5</b>	0	2
Phosphorus	ppm	ASTM D5185m		<b>661</b>	527	403
Zinc	ppm	ASTM D5185m		<b>7</b>	4	0
Sulfur	ppm	ASTM D5185m		<b>1470</b>	412	303

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>806</b>	19	42
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Water	%	ASTM D6304	>0.1	<b>0.006</b>	0.00	0.005
ppm Water	ppm	ASTM D6304	>1000	<b>64</b>	0	57.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	<b>12463</b>	2156	2905
Particles >6µm		ASTM D7647	>320	<b>2627</b>	802	887
Particles >14µm		ASTM D7647	>80	<b>314</b>	151	131
Particles >21µm		ASTM D7647	>20	<b>126</b>	77	46
Particles >38µm		ASTM D7647	>4	<b>13</b>	10	2
Particles >71µm		ASTM D7647	>3	<b>1</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	<b>21/19/15</b>	18/17/14	19/17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.78</b>	0.79	0.64

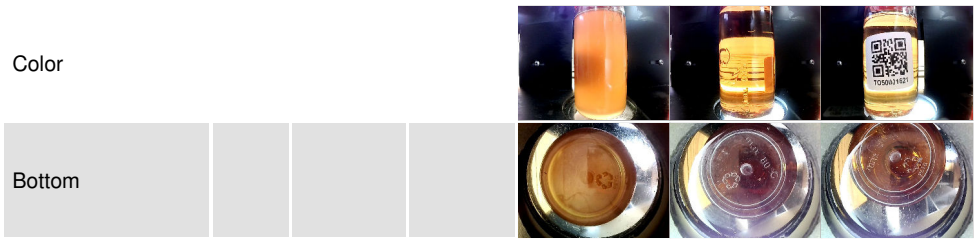
# OIL ANALYSIS REPORT



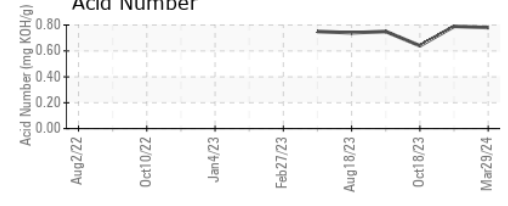
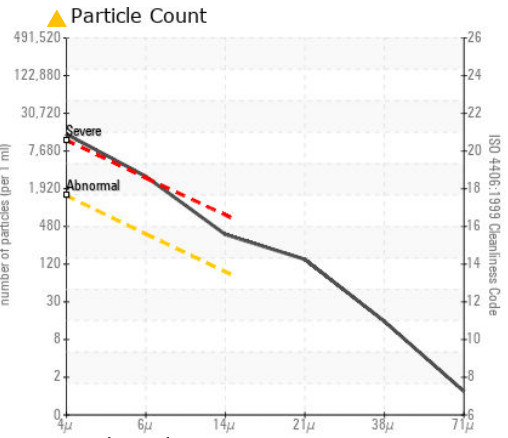
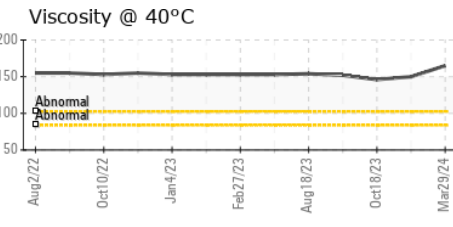
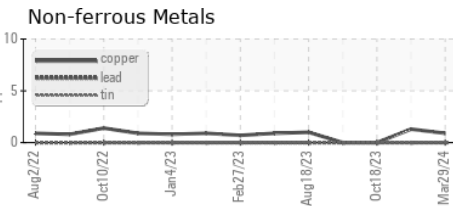
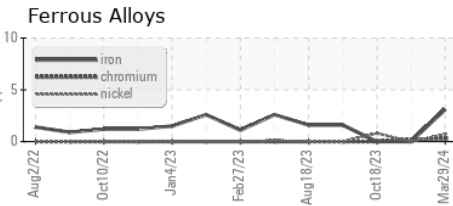
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	165	150	146
Visc @ 100°C	cSt	ASTM D445	17.0	15.6	15.6
Viscosity Index (VI)	Scale	ASTM D2270	110	106	110

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50002228 **Received** : 03 Apr 2024  
**Lab Number** : 06137406 **Tested** : 08 Apr 2024  
**Unique Number** : 10956871 **Diagnosed** : 08 Apr 2024 - Jonathan Hester  
**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)