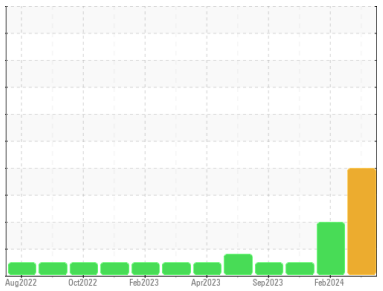
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Thermoforming
Machine Id
Line 4 D Extruder (S/N X8143)
Component
Bevel Helical Gearbox
Fluid
{not provided} (8 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		**TO50002229**	TO50002178	TO50001624
Sample Date		Client Info		**29 Mar 2024**	29 Feb 2024	18 Oct 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Filtered**	Not Changd	N/A
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**11**	17	11
Iron	ppm	ASTM D5185m	>150	**1**	0	0
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	2	<1
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**<1**	2	<1
Tin	ppm	ASTM D5185m	>10	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	<1	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**1**	1	3
Calcium	ppm	ASTM D5185m		**5**	34	2
Phosphorus	ppm	ASTM D5185m		**630**	539	577
Zinc	ppm	ASTM D5185m		**12**	13	0
Sulfur	ppm	ASTM D5185m		**1043**	723	698

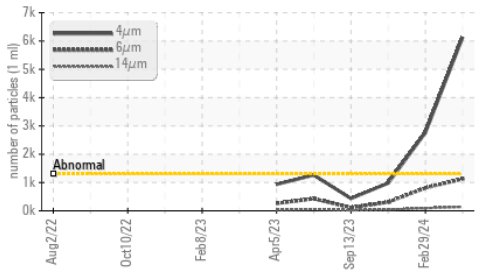
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**329**	10	12
Sodium	ppm	ASTM D5185m		**0**	1	<1
Potassium	ppm	ASTM D5185m	>20	**1**	1	1
Water	%	ASTM D6304	>0.1	**0.004**	0.00	0.005
ppm Water	ppm	ASTM D6304	>1000	**42**	0	51.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	**6132**	2764	981
Particles >6µm		ASTM D7647	>320	**1126**	808	307
Particles >14µm		ASTM D7647	>80	**137**	92	40
Particles >21µm		ASTM D7647	>20	**56**	32	13
Particles >38µm		ASTM D7647	>4	**10**	3	2
Particles >71µm		ASTM D7647	>3	**2**	1	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	**20/17/14**	19/17/14	17/15/12

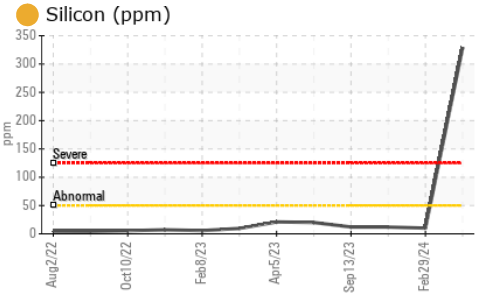
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.73**	0.71	0.66

OIL ANALYSIS REPORT

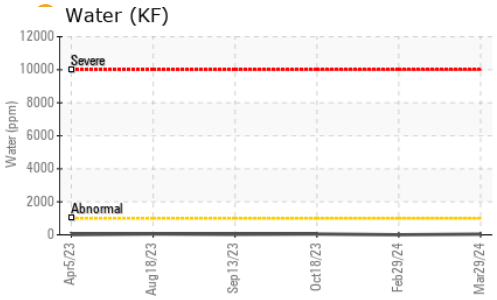
Particle Trend



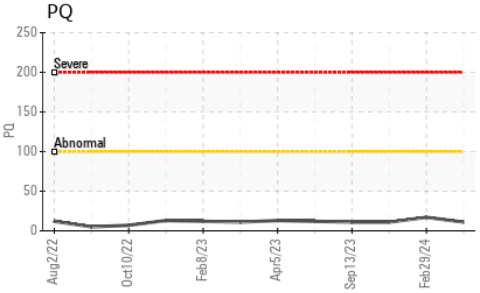
Silicon (ppm)



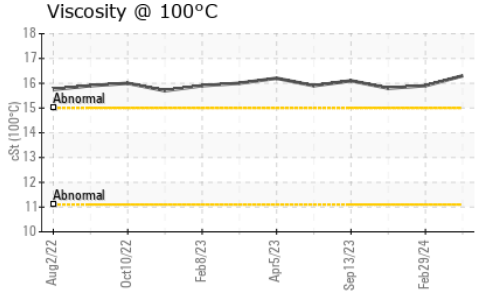
Water (KF)



PQ

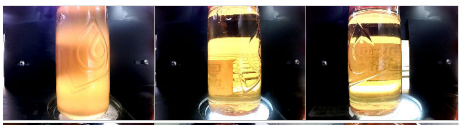


Viscosity @ 100°C



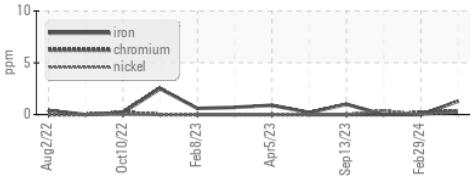
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**160**	156	157
Visc @ 100°C	cSt	ASTM D445		**16.3**	15.9	15.8
Viscosity Index (VI)	Scale	ASTM D2270		**106**	105	103

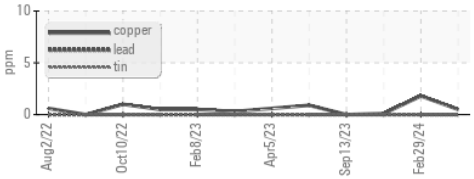
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

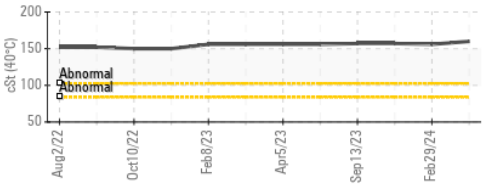
Ferrous Alloys



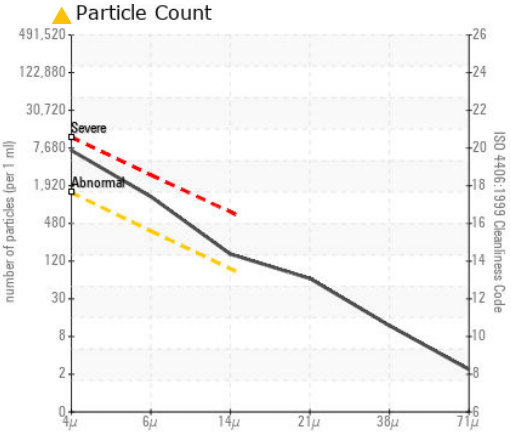
Non-ferrous Metals



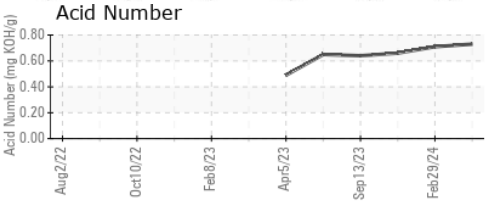
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002229
Lab Number : 06137401
Unique Number : 10956866
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)

Received : 03 Apr 2024
Tested : 08 Apr 2024
Diagnosed : 08 Apr 2024 - Jonathan Hester

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:

Report Id: DARDALTX [WUSCAR] 06137401 (Generated: 04/08/2024 09:25:32) Rev: 2

Submitted By: YON PALOMINO