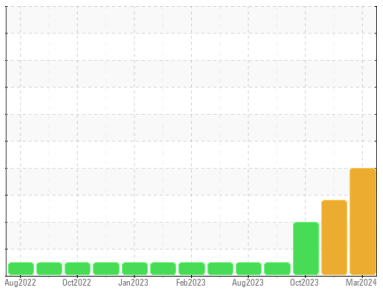
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Thermoforming
Machine Id
Line 4 B Extruder (S/N X8156)
Component
Bevel Helical Gearbox
Fluid
{not provided} (8 GAL)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
There is a moderate 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		**TO50002230**	TO50002206	TO50001625
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				**ATTENTION**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**12**	13	10
Iron	ppm	ASTM D5185m	>150	**14**	9	9
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	0
Nickel	ppm	ASTM D5185m	>10	**0**	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**	1	<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**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**<1**	<1	4
Calcium	ppm	ASTM D5185m		**5**	0	2
Phosphorus	ppm	ASTM D5185m		**966**	592	632
Zinc	ppm	ASTM D5185m		**11**	6	<1
Sulfur	ppm	ASTM D5185m		**1074**	571	639

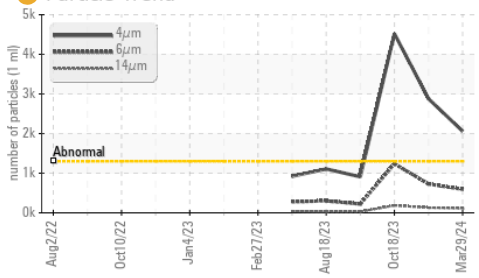
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**187**	8	6
Sodium	ppm	ASTM D5185m		**3**	2	3
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	2
Water	%	ASTM D6304	>0.1	**0.002**	0.003	0.004
ppm Water	ppm	ASTM D6304	>1000	**24**	31	42.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	**2059**	▲ 2879	▲ 4520
Particles >6µm		ASTM D7647	>320	**593**	▲ 728	▲ 1239
Particles >14µm		ASTM D7647	>80	**113**	▲ 130	▲ 186
Particles >21µm		ASTM D7647	>20	**54**	▲ 69	▲ 70
Particles >38µm		ASTM D7647	>4	**10**	▲ 12	2
Particles >71µm		ASTM D7647	>3	**1**	▲ 2	0
Oil Cleanliness		ISO 4406 (c)	>17/15/13	**18/16/14**	▲ 19/17/14	▲ 19/17/15

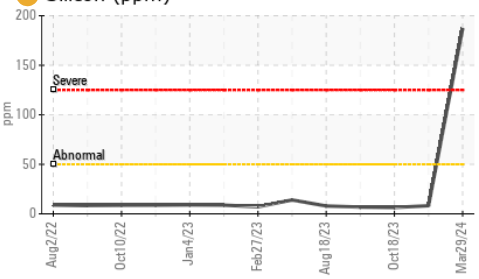
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.76**	0.76	0.74

OIL ANALYSIS REPORT

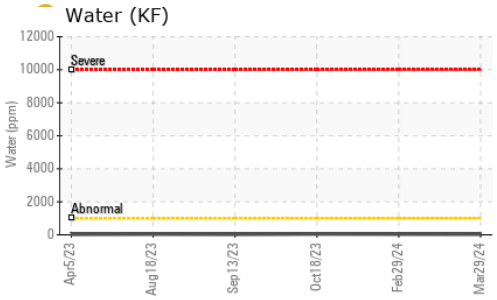
Particle Trend



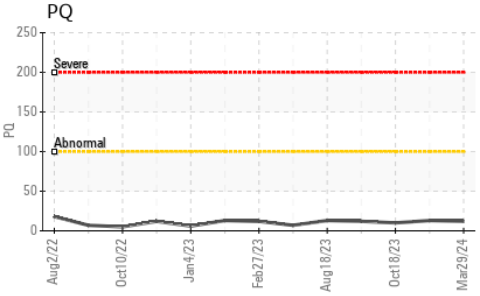
Silicon (ppm)



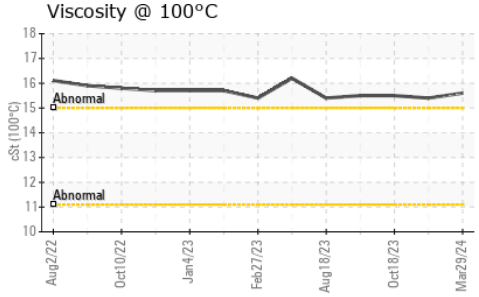
Water (KF)



PQ



Viscosity @ 100°C



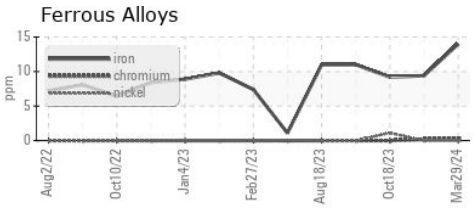
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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		**152**	150	150
Visc @ 100°C	cSt	ASTM D445		**15.6**	15.4	15.5
Viscosity Index (VI)	Scale	ASTM D2270		**105**	104	105

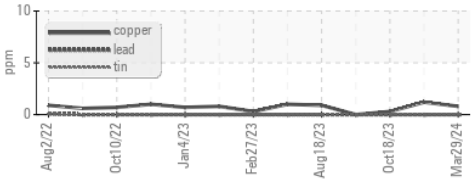
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

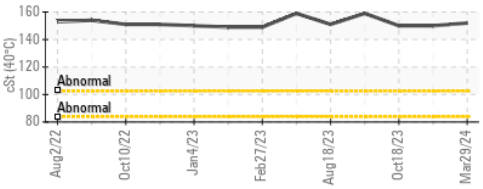
Ferrous Alloys



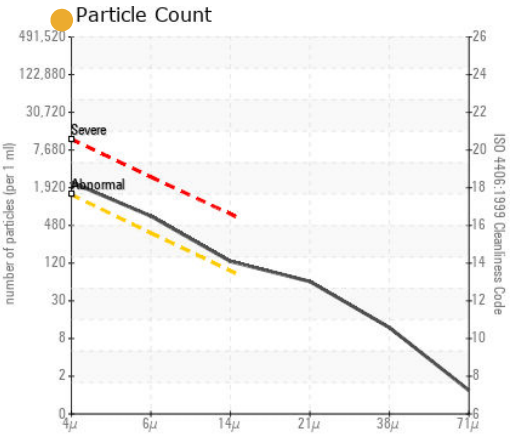
Non-ferrous Metals



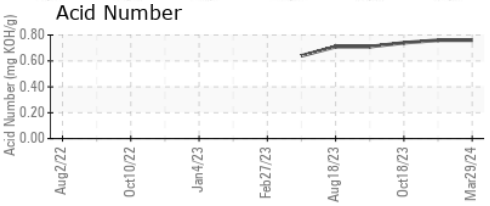
Viscosity @ 40°C



Particle Count



Acid Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002230
Lab Number : 06137405
Unique Number : 10956870
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: