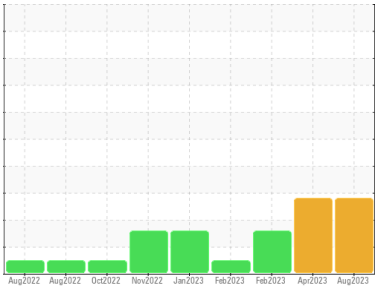
PROBLEM SUMMARY

Sample Rating Trend

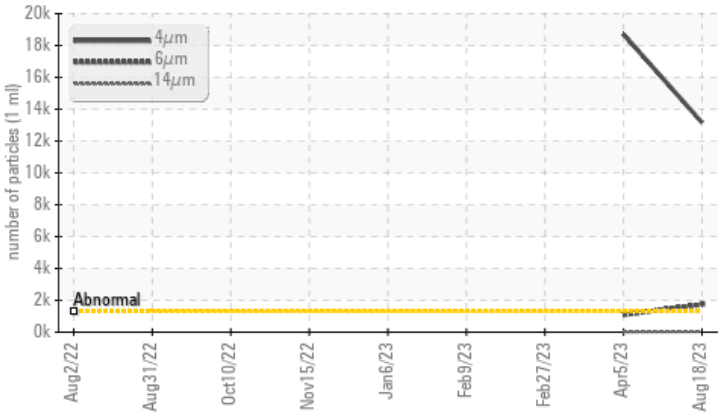


DIRT

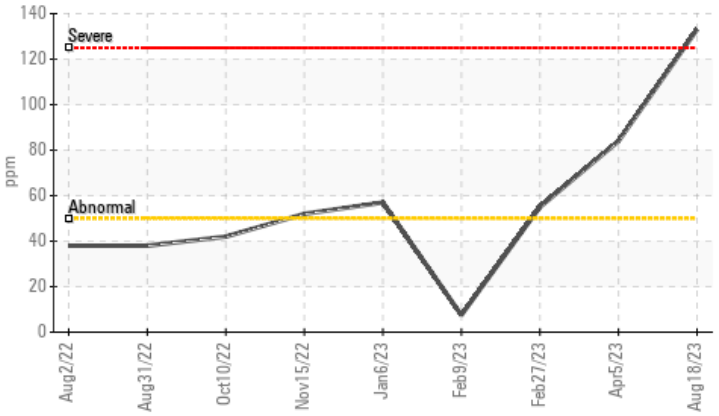
Area
Thermoforming
Machine Id
Line 8 C Extruder (S/N 4276)
Component
Bevel Helical Gearbox
Fluid
SUMMIT UNIPAR FG-320 (60 GAL)

COMPONENT CONDITION SUMMARY

Particle Trend



Silicon (ppm)



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. (Customer Sample Comment: Bengamen Castillo)

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m	>50	▲ **133**	▲ 84	▲ 55
Particles >4µm		ASTM D7647	>1300	▲ **13165**	▲ 18708	---
Particles >6µm		ASTM D7647	>320	▲ **1738**	▲ 1080	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **21/18/12**	▲ 21/17/12	---

Customer Id: DARDALTX
Sample No.: TO50001739
Lab Number: 05933495
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

05 Apr 2023 Diag: Doug Bogart

DIRT

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

27 Feb 2023 Diag: Sean Felton

DIRT

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal. The condition of the oil is acceptable for the time in service.

view report

09 Feb 2023 Diag: Sean Felton

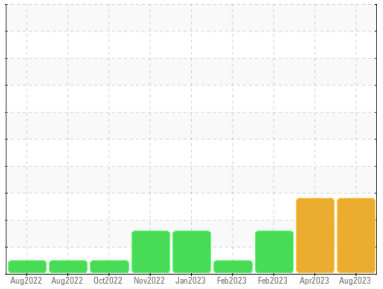
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Thermoforming
Machine Id
Line 8 C Extruder (S/N 4276)
Component
Bevel Helical Gearbox
Fluid
SUMMIT UNIPAR FG-320 (60 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. (Customer Sample Comment: Bengamen Castillo)

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 indicating ingress of seal material.

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		**TO50001739**	TO50001591	TO50001399
Sample Date		Client Info		**18 Aug 2023**	05 Apr 2023	27 Feb 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**13**	11	13
Iron	ppm	ASTM D5185m	>150	**5**	2	<1
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	0	0
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		**0**	0	0
Barium	ppm	ASTM D5185m		**2**	2	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**1**	0	6
Calcium	ppm	ASTM D5185m		**4**	0	<1
Phosphorus	ppm	ASTM D5185m		**902**	541	497
Zinc	ppm	ASTM D5185m		**16**	5	4
Sulfur	ppm	ASTM D5185m		**1383**	917	275

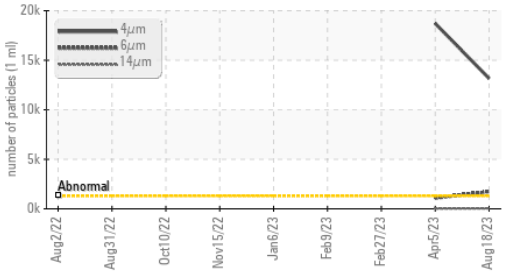
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	▲ **133**	▲ 84	▲ 55
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	0
Water	%	ASTM D6304	>0.1	**0.006**	0.005	---
ppm Water	ppm	ASTM D6304	>1000	**67.7**	57.3	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **13165**	▲ 18708	---
Particles >6µm		ASTM D7647	>320	▲ **1738**	▲ 1080	---
Particles >14µm		ASTM D7647	>80	**39**	27	---
Particles >21µm		ASTM D7647	>20	**12**	8	---
Particles >38µm		ASTM D7647	>4	**1**	0	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **21/18/12**	▲ 21/17/12	---

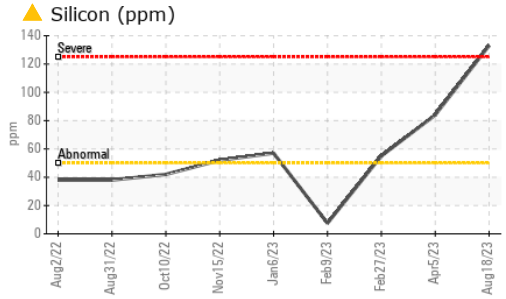
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.73**	0.69	---

OIL ANALYSIS REPORT

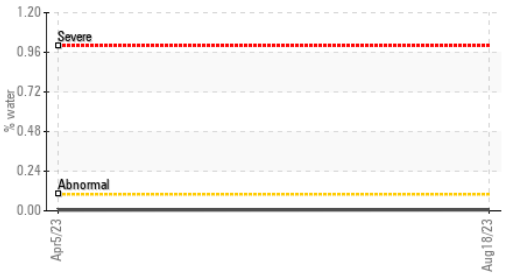
Particle Trend



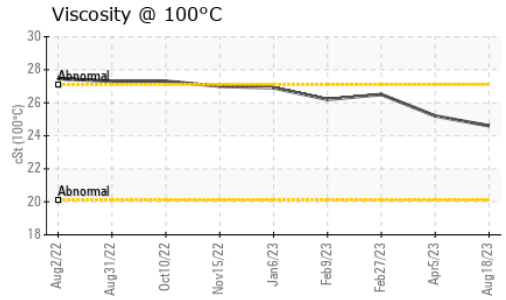
Silicon (ppm)



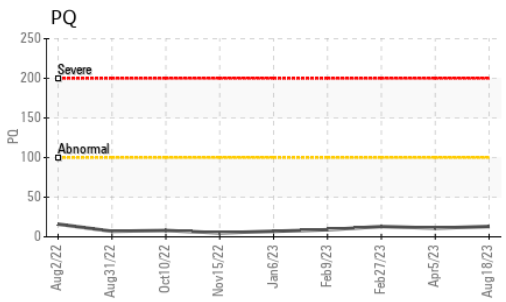
Water



Viscosity @ 100°C

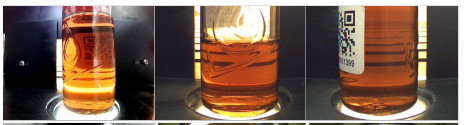


PQ



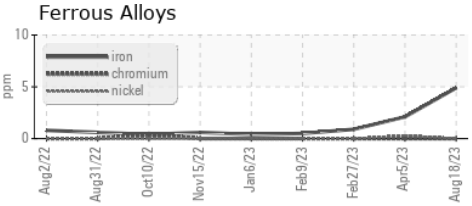
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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		**267**	277	292
Visc @ 100°C	cSt	ASTM D445		**24.6**	25.2	26.5
Viscosity Index (VI)	Scale	ASTM D2270		**117**	116	119

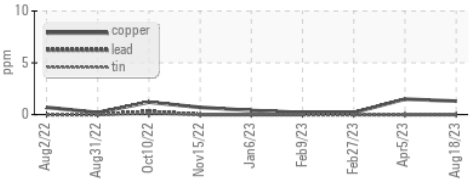
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

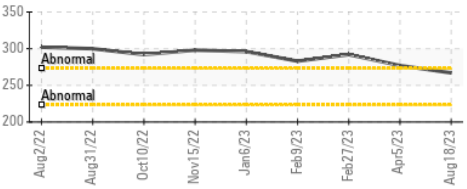
Ferrous Alloys



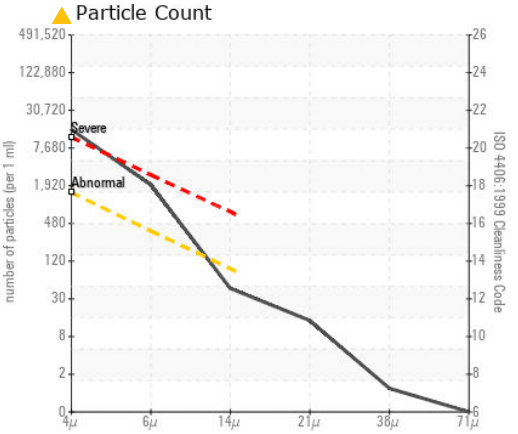
Non-ferrous Metals



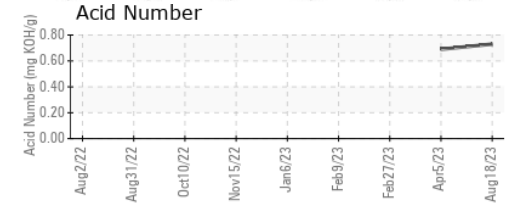
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001739 **Received** : 24 Aug 2023
Lab Number : 05933495 **Diagnosed** : 28 Aug 2023
Unique Number : 10618766 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PQ, PrtCount, VI)

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] 05933495 (Generated: 08/28/2023 13:35:28) Rev: 1

Submitted By: YON PALOMINO