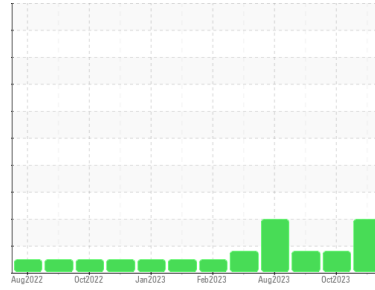
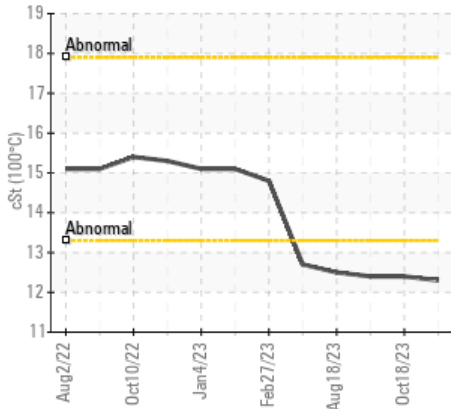


Area
Thermoforming
 Machine Id
Line 10 A Extruder (S/N X8173)
 Component
Bevel Helical Gearbox
 Fluid
SUMMIT UNIPAR FG-150 (3 GAL)

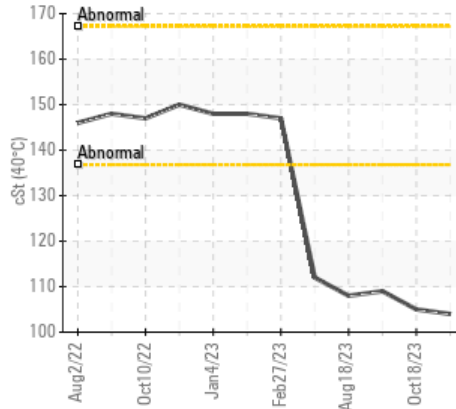


COMPONENT CONDITION SUMMARY

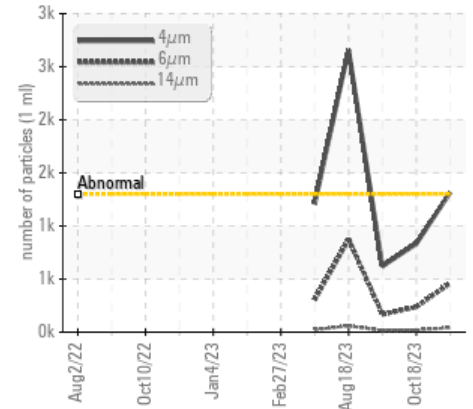
▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ATTENTION	ATTENTION
Particles >4µm	ASTM D7647	>1300	▲ 1315	833	621
Particles >6µm	ASTM D7647	>320	▲ 462	238	167
Oil Cleanliness	ISO 4406 (c)	>17/15/13	▲ 18/16/13	17/15/11	16/15/11
Visc @ 40°C	cSt	ASTM D445	▲ 104	▲ 105	▲ 109
Visc @ 100°C	cSt	ASTM D445	▲ 12.3	▲ 12.4	▲ 12.4

Customer Id: DARDALTX
 Sample No.: TO50001532
 Lab Number: 06013254
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

18 Oct 2023 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. 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 amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

view report



14 Sep 2023 Diag: Don Baldrige

VISCOSITY



No corrective action is recommended at this time. 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 amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

view report



18 Aug 2023 Diag: Jonathan Hester

VISCOSITY

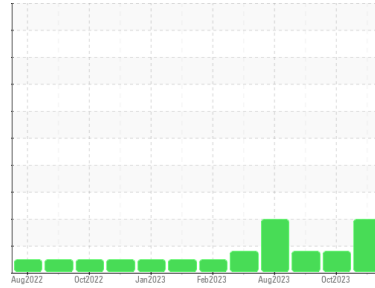


We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

view report



Area
Thermoforming
 Machine Id
Line 10 A Extruder (S/N X8173)
 Component
Bevel Helical Gearbox
 Fluid
SUMMIT UNIPAR FG-150 (3 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.
- Fluid Condition**
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	TO50001532	TO50001681	TO50001712
Sample Date	Client Info	15 Nov 2023	18 Oct 2023	14 Sep 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Changed	N/A	N/A
Sample Status		ATTENTION	ATTENTION	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	7	20	12
Iron	ppm	ASTM D5185m >150	0	0
Chromium	ppm	ASTM D5185m >10	0	0
Nickel	ppm	ASTM D5185m >10	<1	1
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >25	0	<1
Lead	ppm	ASTM D5185m >100	0	0
Copper	ppm	ASTM D5185m >50	<1	<1
Tin	ppm	ASTM D5185m >10	<1	0
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	0	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	<1	<1
Magnesium	ppm	ASTM D5185m	0	4
Calcium	ppm	ASTM D5185m	3	4
Phosphorus	ppm	ASTM D5185m	351	342
Zinc	ppm	ASTM D5185m	0	0
Sulfur	ppm	ASTM D5185m	403	380

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	19	25
Sodium	ppm	ASTM D5185m	<1	1
Potassium	ppm	ASTM D5185m >20	0	3
Water	%	ASTM D6304 >0.1	0.004	0.006
ppm Water	ppm	ASTM D6304 >1000	47.8	60.8

FLUID CLEANLINESS

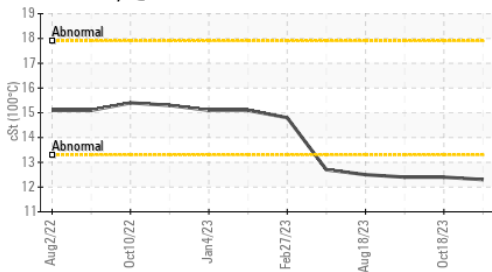
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	▲ 1315	833	621
Particles >6µm	ASTM D7647 >320	▲ 462	238	167
Particles >14µm	ASTM D7647 >80	41	19	16
Particles >21µm	ASTM D7647 >20	12	6	6
Particles >38µm	ASTM D7647 >4	1	1	2
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ 18/16/13	17/15/11	16/15/11

FLUID DEGRADATION

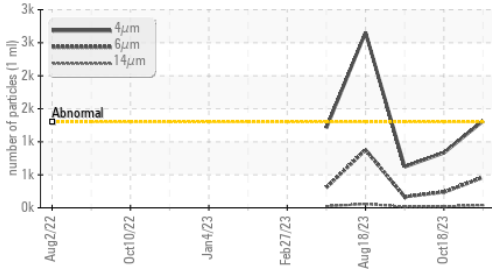
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.46	0.51
				0.48

OIL ANALYSIS REPORT

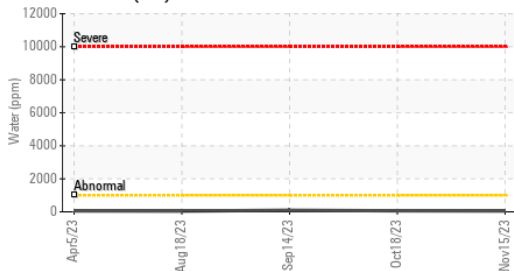
▲ Viscosity @ 100°C



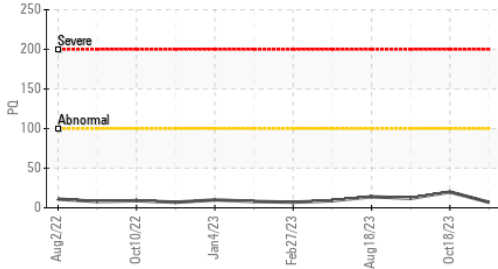
▲ Particle Trend



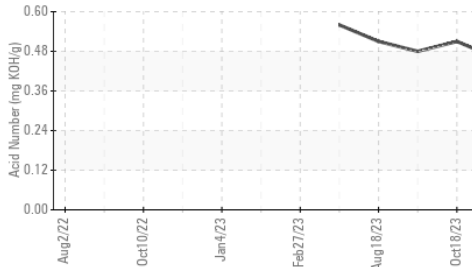
Water (KF)



PQ



Acid Number

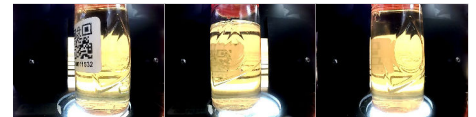


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	▲ 104	▲ 105	▲ 109
Visc @ 100°C	cSt	ASTM D445	▲ 12.3	▲ 12.4	▲ 12.4
Viscosity Index (VI)	Scale	ASTM D2270	109	110	105

SAMPLE IMAGES

Color

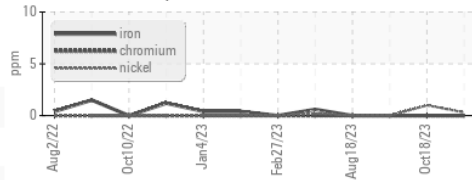


Bottom

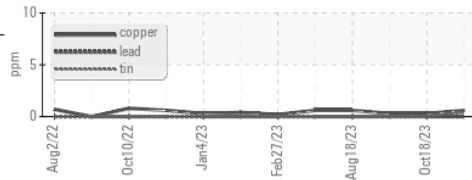


GRAPHS

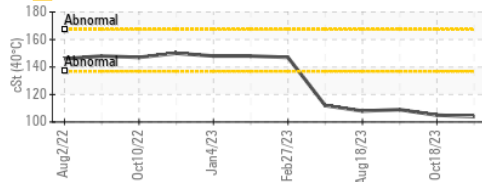
Ferrous Alloys



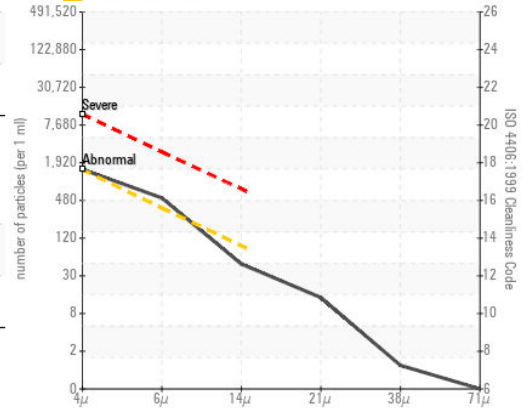
Non-ferrous Metals



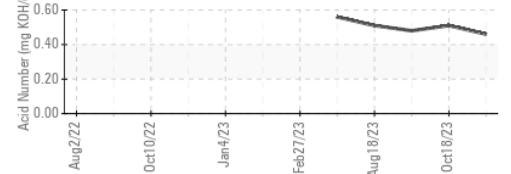
▲ Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001532 **Received** : 20 Nov 2023
Lab Number : 06013254 **Diagnosed** : 22 Nov 2023
Unique Number : 10752398 **Diagnostician** : 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)