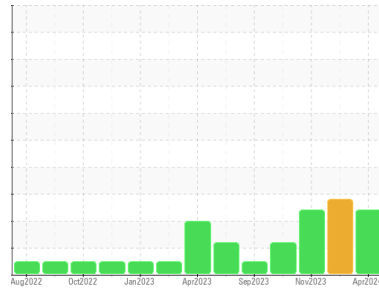


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
Thermoforming
 Machine Id
Line 3 A Extruder (S/N X8245)
 Component
Bevel Helical Gearbox
 Fluid
SUMMIT UNIPAR FG-150 (3 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

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	TO50002196	TO50002201	TO50001976
Sample Date	Client Info	22 Apr 2024	29 Feb 2024	15 Nov 2023
Machine Age	hrs	0	1000	1000
Oil Age	hrs	0	1000	1000
Oil Changed	Client Info	N/A	Not Changd	Not Changd
Sample Status		ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	15	10	13
Iron	ppm	ASTM D5185m >150	<1	0
Chromium	ppm	ASTM D5185m >10	<1	0
Nickel	ppm	ASTM D5185m >10	<1	0
Titanium	ppm	ASTM D5185m	<1	0
Silver	ppm	ASTM D5185m	<1	0
Aluminum	ppm	ASTM D5185m >25	3	2
Lead	ppm	ASTM D5185m >100	<1	0
Copper	ppm	ASTM D5185m >50	3	2
Tin	ppm	ASTM D5185m >10	<1	0
Vanadium	ppm	ASTM D5185m	<1	0
Cadmium	ppm	ASTM D5185m	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	<1	0
Molybdenum	ppm	ASTM D5185m	<1	0
Manganese	ppm	ASTM D5185m	<1	0
Magnesium	ppm	ASTM D5185m	1	<1
Calcium	ppm	ASTM D5185m	0	0
Phosphorus	ppm	ASTM D5185m	532	424
Zinc	ppm	ASTM D5185m	6	1
Sulfur	ppm	ASTM D5185m	527	346

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	15	17
Sodium	ppm	ASTM D5185m	0	<1
Potassium	ppm	ASTM D5185m >20	2	<1
Water	%	ASTM D6304 >0.1	0.001	0.006
ppm Water	ppm	ASTM D6304 >1000	2	65

FLUID CLEANLINESS

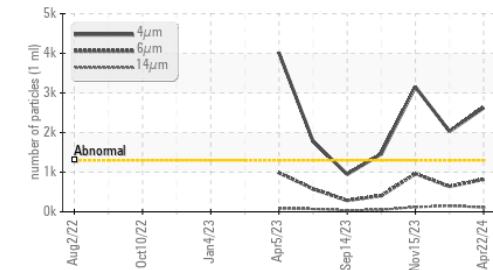
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	▲ 2623	● 2029	▲ 3153
Particles >6µm	ASTM D7647 >320	▲ 819	● 639	▲ 962
Particles >14µm	ASTM D7647 >80	▲ 114	● 151	▲ 119
Particles >21µm	ASTM D7647 >20	▲ 52	● 86	▲ 48
Particles >38µm	ASTM D7647 >4	▲ 5	● 21	▲ 11
Particles >71µm	ASTM D7647 >3	0	● 3	▲ 3
Oil Cleanliness	ISO 4406 (c) >17/15/13	▲ 19/17/14	● 18/16/14	▲ 19/17/14

FLUID DEGRADATION

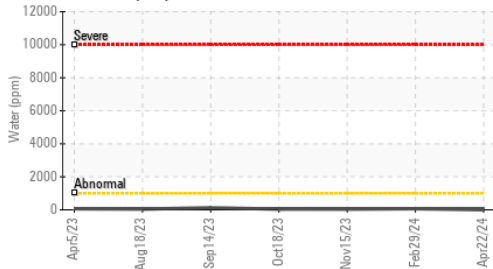
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.71	0.67
				0.52

OIL ANALYSIS REPORT

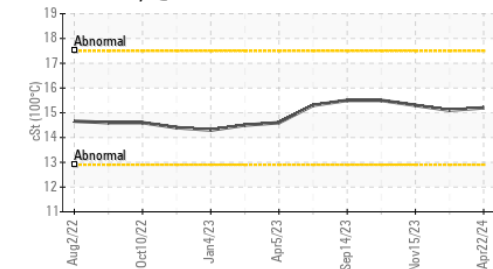
▲ Particle Trend



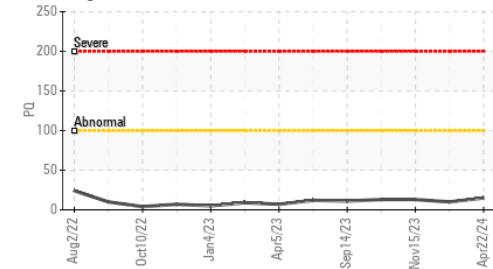
Water (KF)



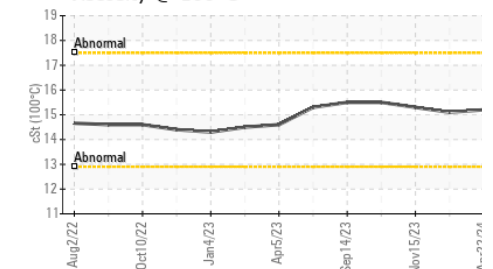
Viscosity @ 100°C



PQ



Viscosity @ 100°C



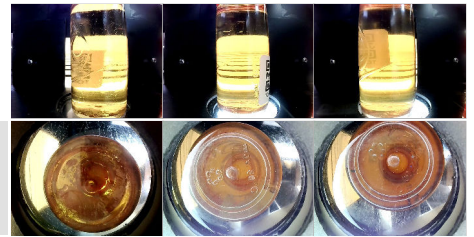
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	146	147	148
Visc @ 100°C	cSt	ASTM D445	15.2	15.1	15.3
Viscosity Index (VI)	Scale	ASTM D2270	105	103	104

SAMPLE IMAGES	method	limit/base	current	history1	history2
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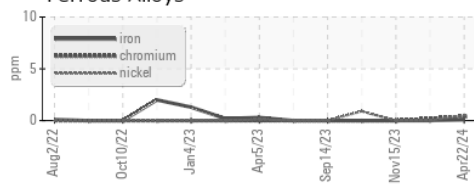
Color

Bottom

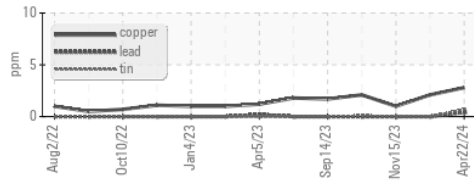


GRAPHS

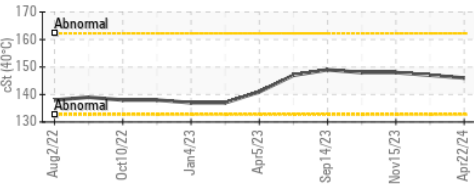
Ferrous Alloys



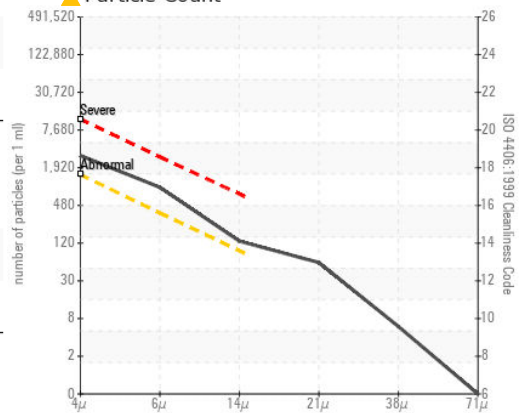
Non-ferrous Metals



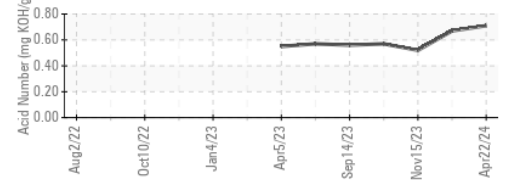
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50002196 **Received** : 22 Apr 2024
Lab Number : 06156962 **Tested** : 23 Apr 2024
Unique Number : 10992385 **Diagnosed** : 25 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)