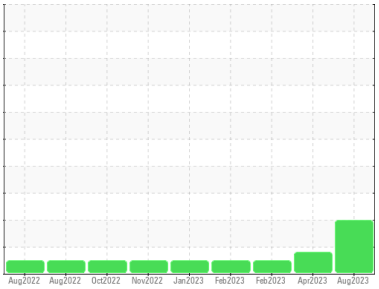
PROBLEM SUMMARY

Sample Rating Trend

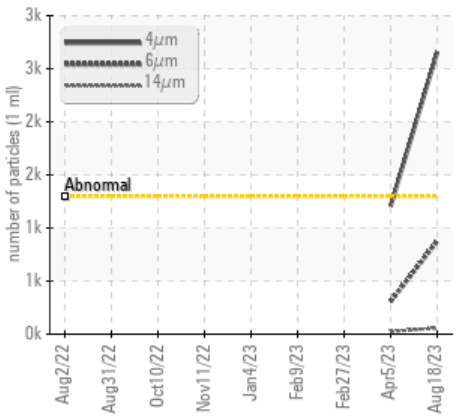


VISCOSITY

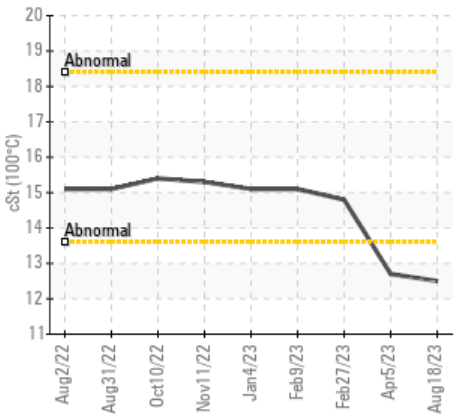
Area
Thermoforming
Machine Id
Line 10 A Extruder (S/N X8173)
Component
Bevel Helical Gearbox
Fluid
SUMMIT UNIPAR FG-150 (3 GAL)

COMPONENT CONDITION SUMMARY

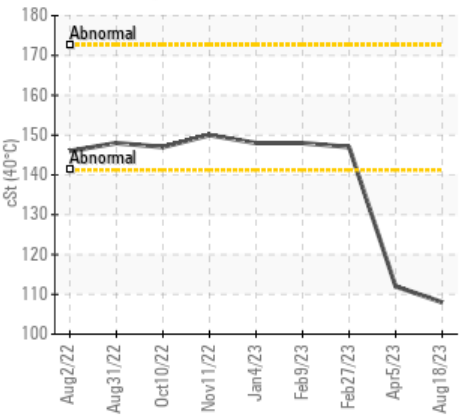
Particle Trend



Viscosity @ 100°C



Viscosity @ 40°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	NORMAL
Particles >4µm		ASTM D7647	>1300	▲ **2657**	1208	---
Particles >6µm		ASTM D7647	>320	▲ **877**	306	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/17/13**	17/15/12	---
Visc @ 40°C	cSt	ASTM D445		▲ **108**	▲ 112	147
Visc @ 100°C	cSt	ASTM D445		▲ **12.5**	▲ 12.7	14.8

Customer Id: DARDALTX
Sample No.: TO50001741
Lab Number: 05933497
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: 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

27 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

09 Feb 2023 Diag: Sean Felton

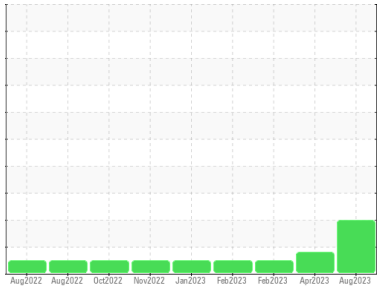
NORMAL

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



VISCOSITY

Area
Thermoforming
Machine Id
Line 10 A Extruder (S/N X8173)
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. (Customer Sample Comment: Benjamin 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.

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		**TO50001741**	TO50001588	TO50001401
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**	ATTENTION	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**14**	9	7
Iron	ppm	ASTM D5185m	>150	**0**	<1	0
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**	<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		**0**	0	0
Barium	ppm	ASTM D5185m		**2**	1	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	6
Calcium	ppm	ASTM D5185m		**0**	0	0
Phosphorus	ppm	ASTM D5185m		**374**	511	558
Zinc	ppm	ASTM D5185m		**4**	0	3
Sulfur	ppm	ASTM D5185m		**48**	574	537

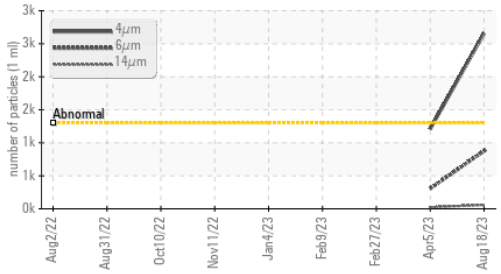
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**26**	16	12
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**1**	<1	0
Water	%	ASTM D6304	>0.1	**0.004**	0.005	---
ppm Water	ppm	ASTM D6304	>1000	**43.9**	54.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **2657**	1208	---
Particles >6µm		ASTM D7647	>320	▲ **877**	306	---
Particles >14µm		ASTM D7647	>80	**58**	23	---
Particles >21µm		ASTM D7647	>20	**15**	6	---
Particles >38µm		ASTM D7647	>4	**1**	0	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **19/17/13**	17/15/12	---

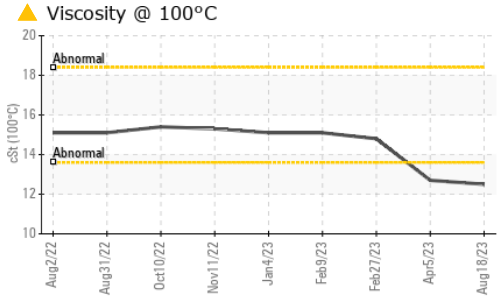
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.51**	0.56	---

OIL ANALYSIS REPORT

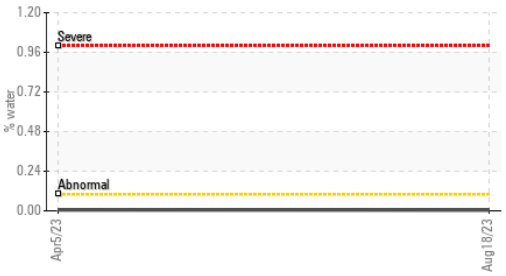
Particle Trend



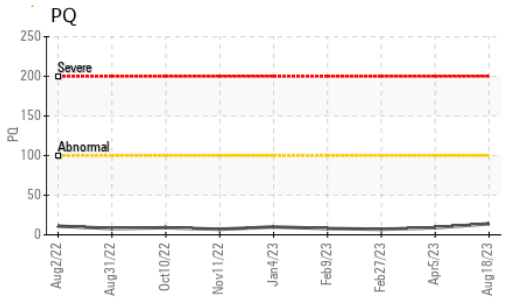
Viscosity @ 100°C



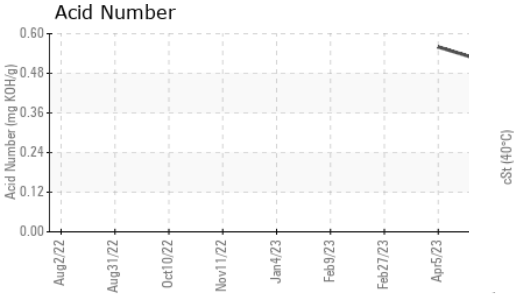
Water



PQ

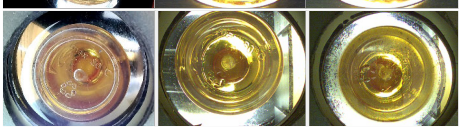


Acid Number



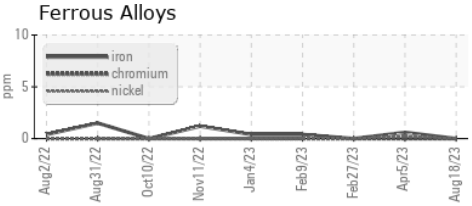
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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		▲ **108**	▲ 112	147
Visc @ 100°C	cSt	ASTM D445		▲ **12.5**	▲ 12.7	14.8
Viscosity Index (VI)	Scale	ASTM D2270		**107**	106	99

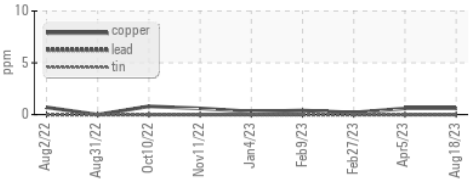
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

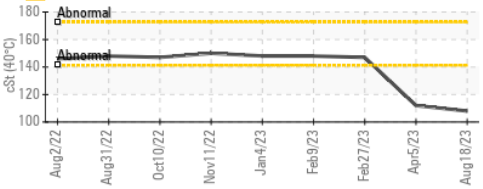
Ferrous Alloys



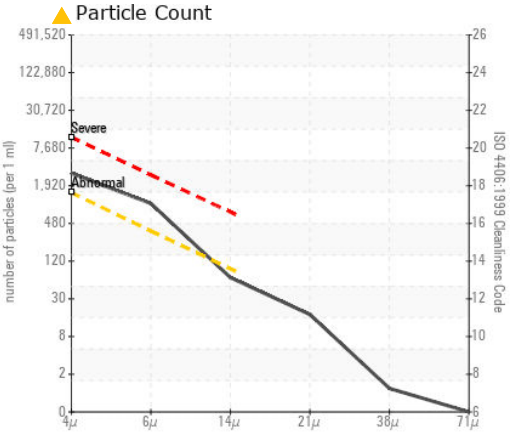
Non-ferrous Metals



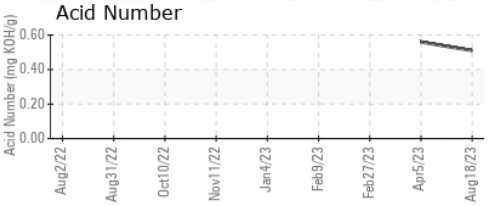
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001741 **Received** : 24 Aug 2023
Lab Number : 05933497 **Diagnosed** : 28 Aug 2023
Unique Number : 10618768 **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)

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Report Id: DARDALTX [WUSCAR] 05933497 (Generated: 08/28/2023 19:04:11) Rev: 1

Submitted By: YON PALOMINO