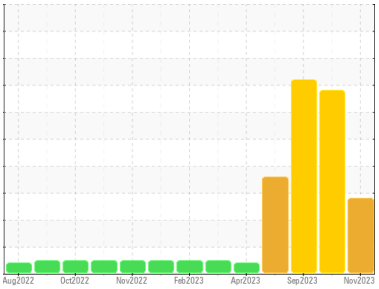
PROBLEM SUMMARY

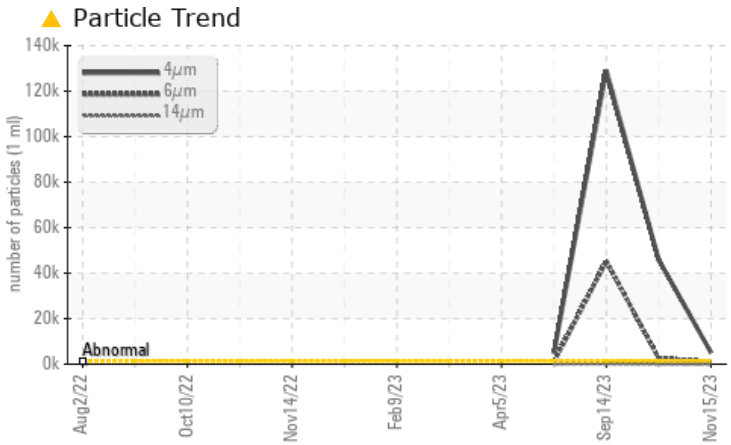
Sample Rating Trend

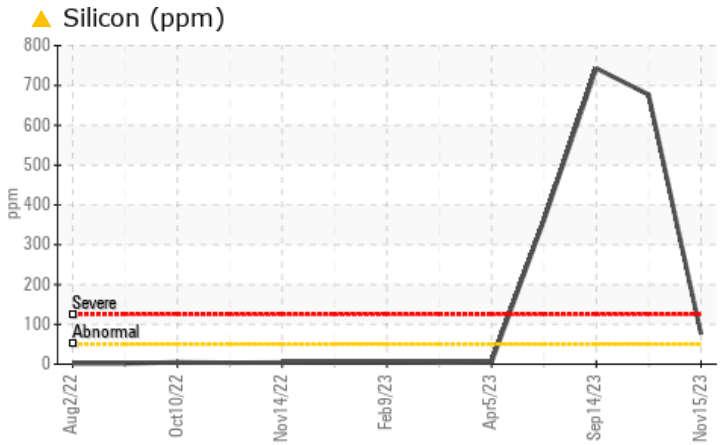


DIRT

Area
Thermoforming
Machine Id
Line 14 Extruder (S/N 18665)
Component
Bevel Helical Gearbox
Fluid
SUMMIT SYNGEAR FG-220 (13 GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	SEVERE	SEVERE
Silicon	ppm	ASTM D5185m	>50	▲ **76**	⬢ 677	⬢ 743
Particles >4µm		ASTM D7647	>1300	▲ **5065**	▲ 45937	▲ 129129
Particles >6µm		ASTM D7647	>320	▲ **935**	▲ 2635	▲ 45325
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **20/17/12**	▲ 23/19/14	▲ 24/23/15

Customer Id: DARDALTX
Sample No.: TO50001536
Lab Number: 06013262
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +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: Angela Borella

DIRT

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid.

view report

14 Sep 2023 Diag: Jonathan Hester

DIRT

We recommend you service the filters on this component if applicable. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid.

view report

18 Aug 2023 Diag: Doug Bogart

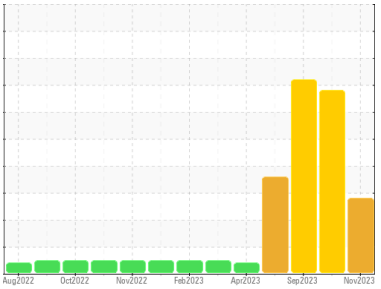
DIRT

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 particulates present in the oil. Elemental level of silicon (Si) above normal. The AN level is acceptable for this fluid.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Area
Thermoforming
Machine Id
Line 14 Extruder (S/N 18665)
Component
Bevel Helical Gearbox
Fluid
SUMMIT SYNGEAR FG-220 (13 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 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		**TO50001536**	TO50001618	TO50001708
Sample Date		Client Info		**15 Nov 2023**	18 Oct 2023	14 Sep 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	N/A	N/A
Sample Status				**ABNORMAL**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**7**	18	18
Iron	ppm	ASTM D5185m	>150	**0**	18	18
Chromium	ppm	ASTM D5185m	>10	**0**	0	0
Nickel	ppm	ASTM D5185m	>10	**0**	<1	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**0**	<1	0
Lead	ppm	ASTM D5185m	>100	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**0**	7	9
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**	3	2
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**<1**	2	2
Calcium	ppm	ASTM D5185m		**1**	2	3
Phosphorus	ppm	ASTM D5185m		**717**	565	571
Zinc	ppm	ASTM D5185m		**0**	2	<1
Sulfur	ppm	ASTM D5185m		**661**	1052	1177

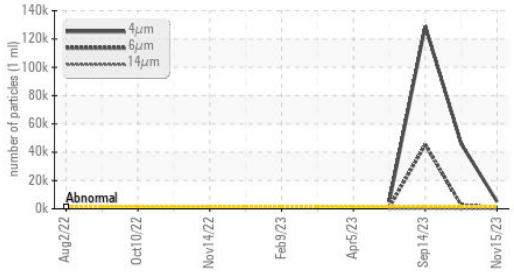
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	▲ **76**	⬢ 677	⬢ 743
Sodium	ppm	ASTM D5185m		**0**	1	2
Potassium	ppm	ASTM D5185m	>20	**0**	1	0
Water	%	ASTM D6304	>0.1	**0.002**	0.004	0.064
ppm Water	ppm	ASTM D6304	>1000	**24.6**	47.7	640

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>1300	▲ **5065**	▲ 45937	▲ 129129
Particles >6µm		ASTM D7647	>320	▲ **935**	▲ 2635	▲ 45325
Particles >14µm		ASTM D7647	>80	**34**	▲ 86	▲ 185
Particles >21µm		ASTM D7647	>20	**10**	▲ 29	▲ 32
Particles >38µm		ASTM D7647	>4	**1**	2	▲ 5
Particles >71µm		ASTM D7647	>3	**0**	0	1
Oil Cleanliness		ISO 4406 (c)	>17/15/13	▲ **20/17/12**	▲ 23/19/14	▲ 24/23/15

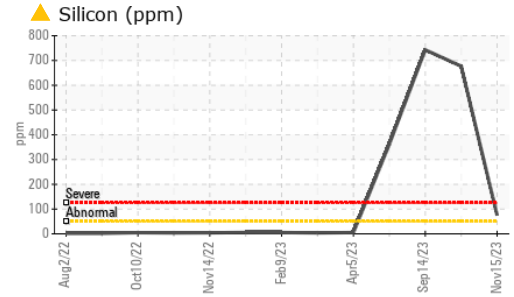
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.62**	0.73	0.66

OIL ANALYSIS REPORT

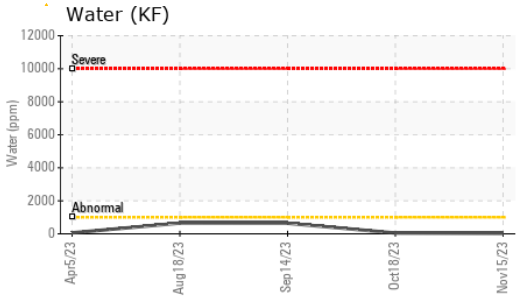
Particle Trend



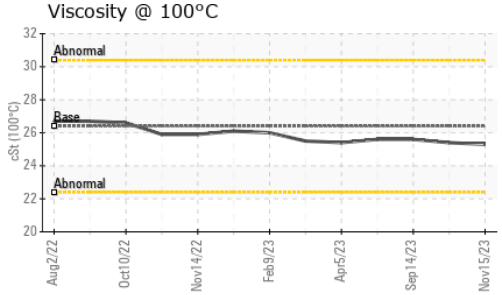
Silicon (ppm)



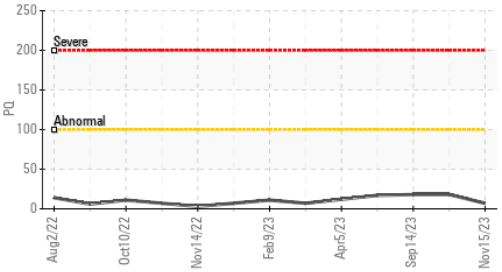
Water (KF)



Viscosity @ 100°C



PQ



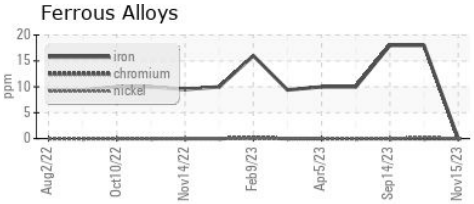
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	233	**222**	268	276
Visc @ 100°C	cSt	ASTM D445	26.4	**25.3**	25.4	25.6
Viscosity Index (VI)	Scale	ASTM D2270	146	**144**	121	119

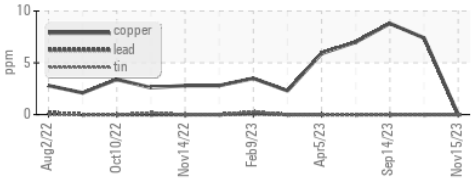
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

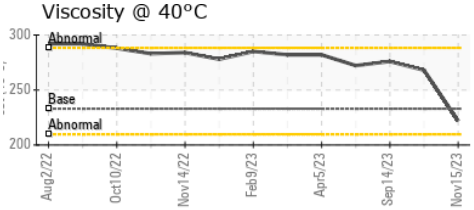
Ferrous Alloys



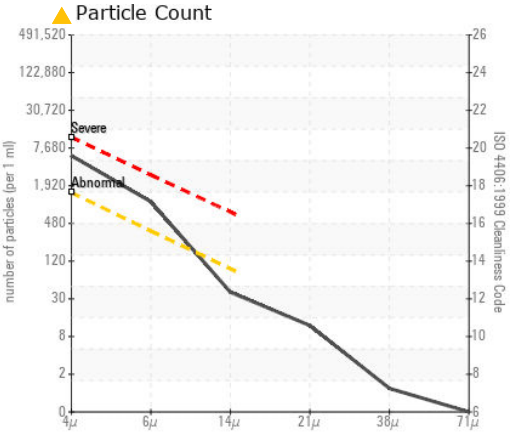
Non-ferrous Metals



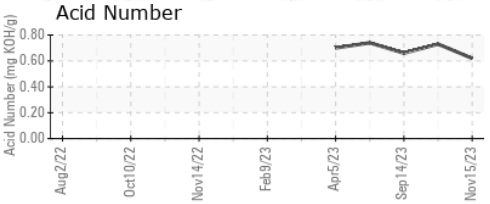
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50001536 **Received** : 20 Nov 2023
Lab Number : 06013262 **Diagnosed** : 22 Nov 2023
Unique Number : 10752406 **Diagnostician** : Don Baldridge
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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