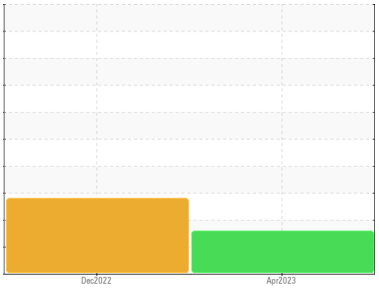
PROBLEM SUMMARY

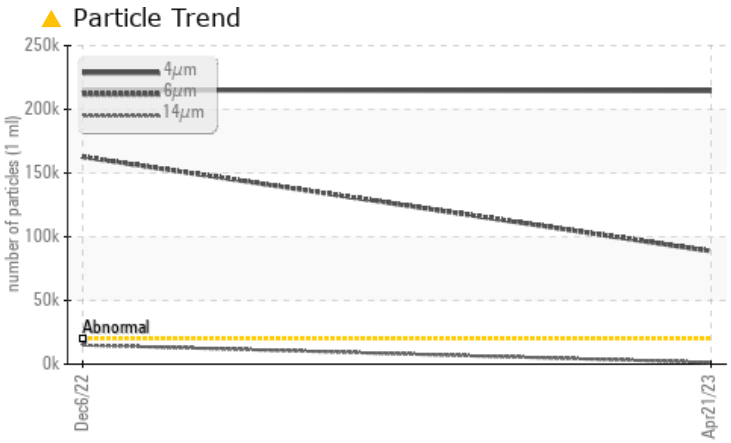
Sample Rating Trend



ISO

Area
OCC AND PULP
Machine Id
421.0555 ID FAN DRIVE SIDE
Component
Gearbox
Fluid
SHELL MORLINA S4 B 68 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. Inspect/change air breather if applicable. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	---
Particles >4µm		ASTM D7647	>20000	▲ **214535**	▲ 215149	---
Particles >6µm		ASTM D7647	>5000	▲ **88662**	▲ 162681	---
Particles >14µm		ASTM D7647	>640	▲ **1345**	▲ 14997	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/24/18**	▲ 25/25/21	---

Customer Id: PORPORWA
Sample No.: PE0000872
Lab Number: 05835130
Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@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
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	---	---	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

06 Dec 2022 Diag: Jonathan Hester

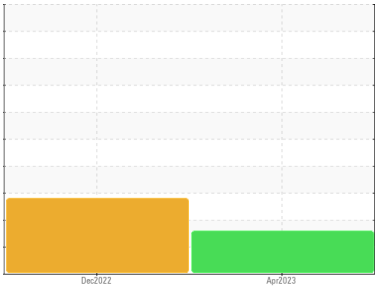
WEAR

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.The lead level is abnormal. Bearing and/or bushing wear is indicated. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
OCC AND PULP
Machine Id
421.0555 ID FAN DRIVE SIDE
Component
Gearbox
Fluid
SHELL MORLINA S4 B 68 (--- GAL)

DIAGNOSIS

▲ Recommendation
Check seals and/or filters for points of contaminant entry. Inspect/change air breather 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 acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PE0000872**	PE0000871	---
Sample Date		Client Info		**21 Apr 2023**	06 Dec 2022	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ABNORMAL**	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**22**	37	---
Iron	ppm	ASTM D5185m	>200	**16**	27	---
Chromium	ppm	ASTM D5185m	>15	**0**	<1	---
Nickel	ppm	ASTM D5185m	>15	**0**	<1	---
Titanium	ppm	ASTM D5185m		**0**	<1	---
Silver	ppm	ASTM D5185m		**0**	<1	---
Aluminum	ppm	ASTM D5185m	>25	**0**	2	---
Lead	ppm	ASTM D5185m	>100	**0**	▲ 173	---
Copper	ppm	ASTM D5185m	>200	**10**	11	---
Tin	ppm	ASTM D5185m	>25	**<1**	4	---
Vanadium	ppm	ASTM D5185m		**0**	<1	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

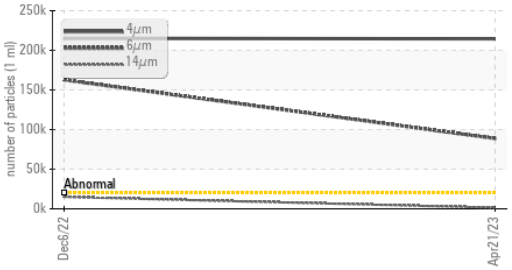
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	<1	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	<1	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**2**	3	---
Calcium	ppm	ASTM D5185m		**27**	99	---
Phosphorus	ppm	ASTM D5185m		**280**	316	---
Zinc	ppm	ASTM D5185m		**18**	7	---
Sulfur	ppm	ASTM D5185m		**622**	436	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**54**	49	---
Sodium	ppm	ASTM D5185m		**4**	7	---
Potassium	ppm	ASTM D5185m	>20	**0**	5	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **214535**	▲ 215149	---
Particles >6µm		ASTM D7647	>5000	▲ **88662**	▲ 162681	---
Particles >14µm		ASTM D7647	>640	▲ **1345**	▲ 14997	---
Particles >21µm		ASTM D7647	>160	**196**	▲ 785	---
Particles >38µm		ASTM D7647	>40	**5**	13	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **25/24/18**	▲ 25/25/21	---

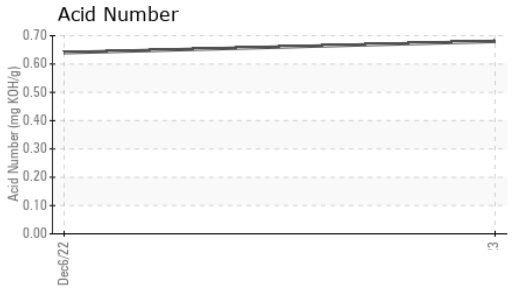
OIL ANALYSIS REPORT

Particle Trend

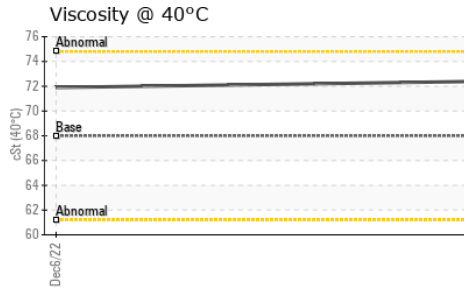


PQ

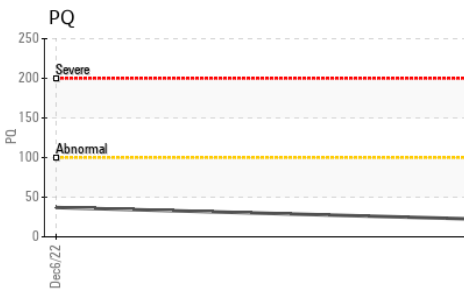
Acid Number



Viscosity @ 40°C



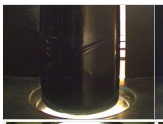
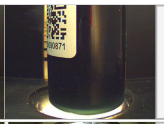
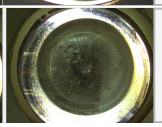
PQ



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.68**	0.64	---

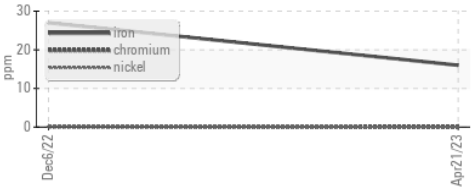
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	VLITE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**72.4**	71.9	---

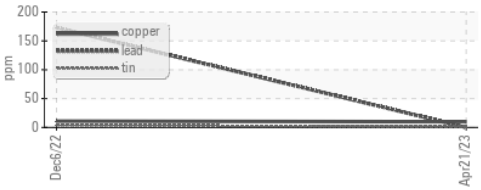
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

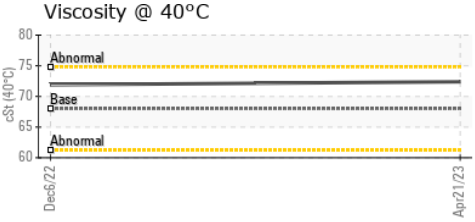
Ferrous Alloys



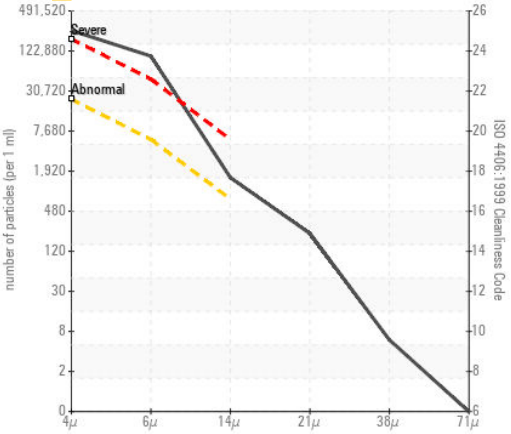
Non-ferrous Metals



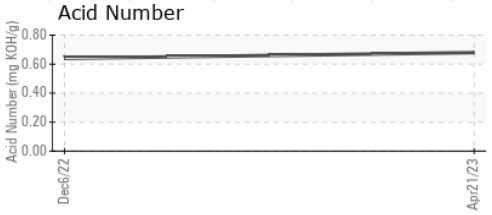
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0000872 **Received** : 02 May 2023
Lab Number : 05835130 **Diagnosed** : 04 May 2023
Unique Number : 10453933 **Diagnostician** : Angela Borella
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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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