



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
PAPER MACHINE
 Machine Id
801.0170 PM1 MACHINE CHEST AGITATOR

Component
Agitator Gearbox
 Fluid
SHELL MORLINA S4 B 220 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0002924	---	---
Sample Date		Client Info		28 Dec 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		12	---	---
Iron	ppm	ASTM D5185m	>150	2	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>100	0	---	---
Copper	ppm	ASTM D5185m	>50	<1	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

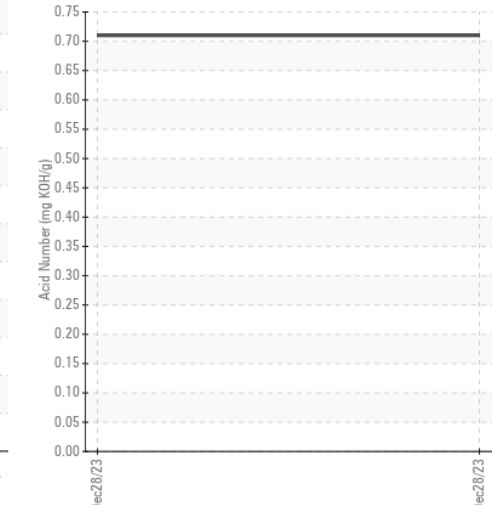
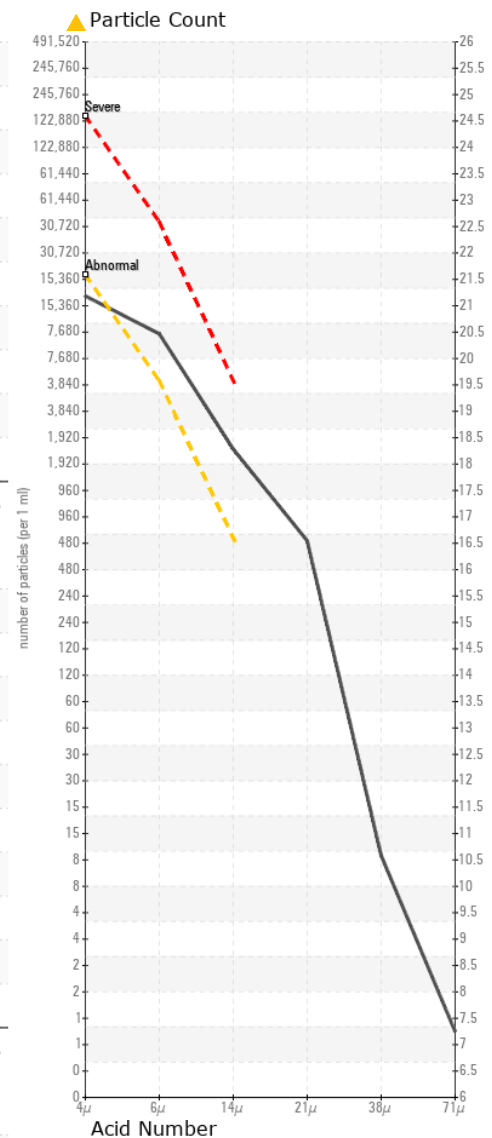
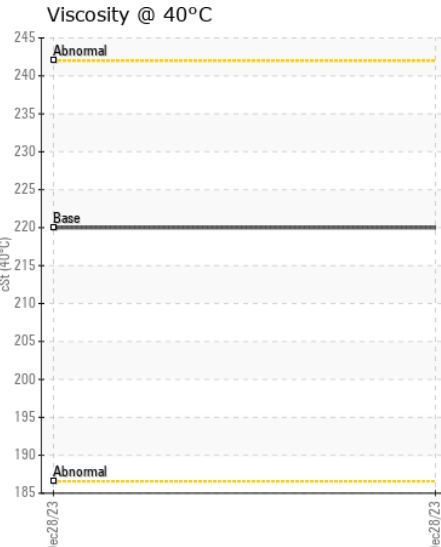
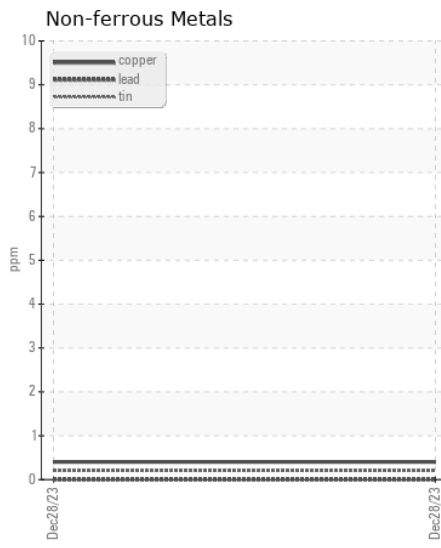
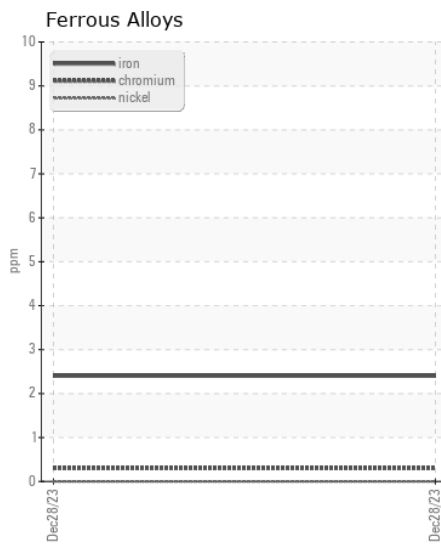
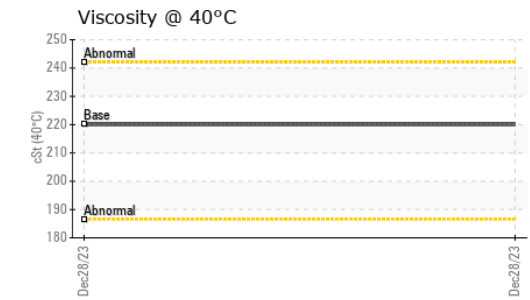
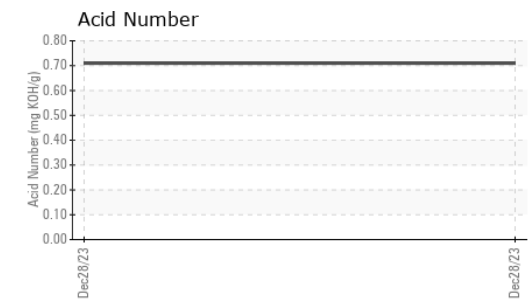
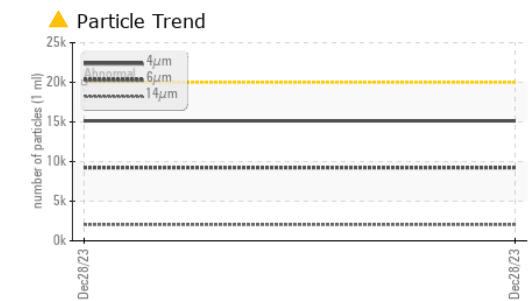
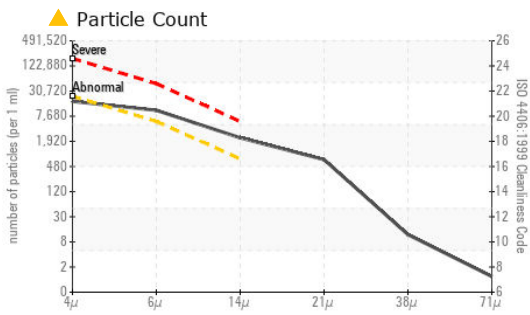
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>50	1	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>20000	15139	---	---
Particles >6µm		ASTM D7647	>5000	▲ 9239	---	---
Particles >14µm		ASTM D7647	>640	▲ 2041	---	---
Particles >21µm		ASTM D7647	>160	▲ 615	---	---
Particles >38µm		ASTM D7647	>40	10	---	---
Particles >71µm		ASTM D7647	>10	1	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 21/20/18	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		0	---	---
Calcium	ppm	ASTM D5185m		1	---	---
Phosphorus	ppm	ASTM D5185m		284	---	---
Zinc	ppm	ASTM D5185m		0	---	---
Sulfur	ppm	ASTM D5185m		914	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.71	---	---
Visc @ 40°C	cSt	ASTM D445	220	220	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0002924 **Received** : 16 Jan 2024
Lab Number : 06061886 **Diagnosed** : 23 Jan 2024
Unique Number : 10833268 **Diagnostician** : Doug Bogart
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

Port Townsend Paper Corporation
 100 Mill Rd
 Port Townsend, WA
 US 98368
 Contact: LONNIE LOREE
 lonnie.loree@ptpc.com
 T: (907)738-6506
 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)