



PERFORMANCE
UNDER
PRESSURE

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
Pulp Mill A-Line
Machine Id
5A ThickStockPumpInput West End (S/N Warren 125 HD)
Component
Drive End Pump
Fluid
ROYAL PURPLE SYNERGY 90/220 (5 GAL)

RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP0039773	RP0039769	RP0038217
Sample Date		Client Info		22 May 2024	22 Mar 2024	28 Feb 2024
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Filter Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL

WEAR

The iron level is severe. The aluminum level is abnormal.

Iron	ppm	ASTM D5185m	>90	▲ 593	▲ 175	▲ 332
Chromium	ppm	ASTM D5185m	>5	5	1	2
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	2	0
Aluminum	ppm	ASTM D5185m	>7	▲ 12	3	9
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	<1	<1	0
Tin	ppm	ASTM D5185m	>9	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

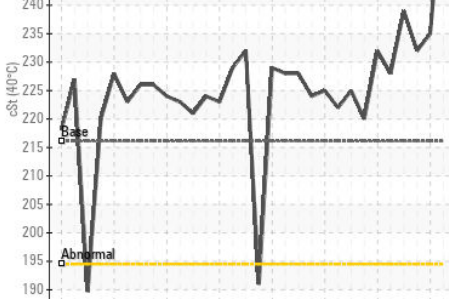
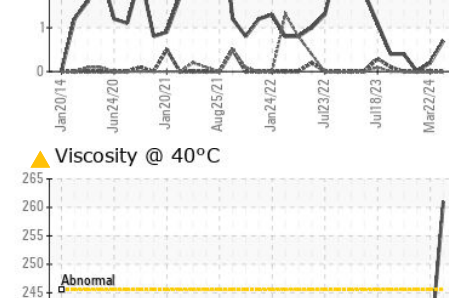
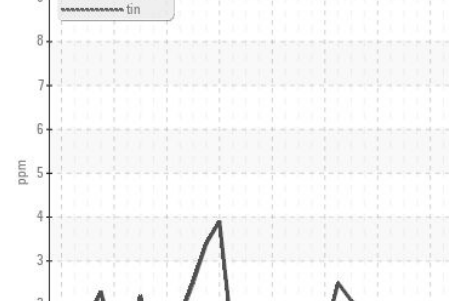
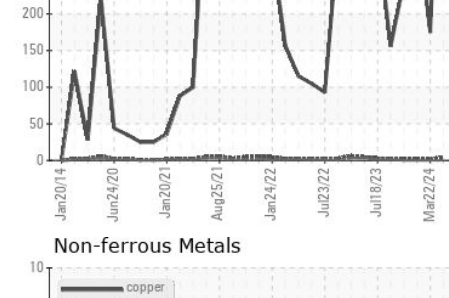
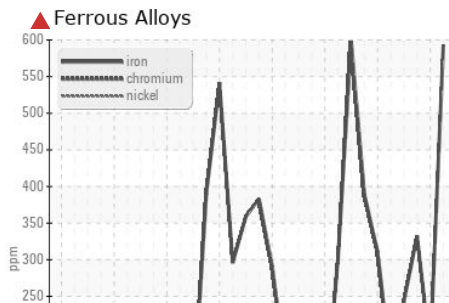
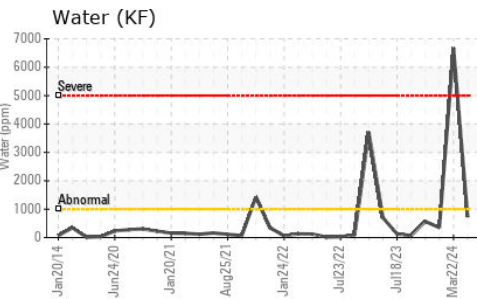
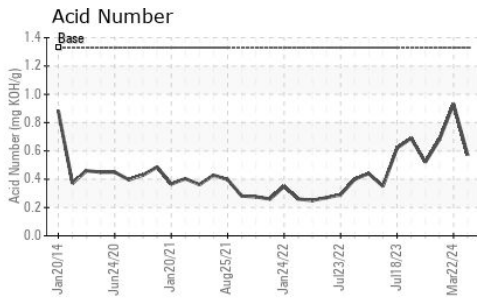
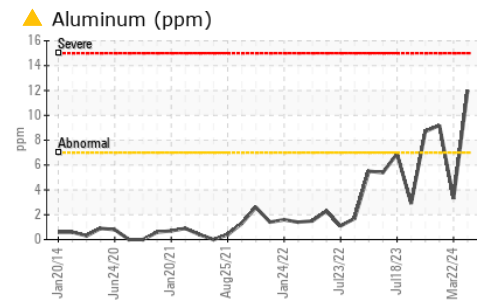
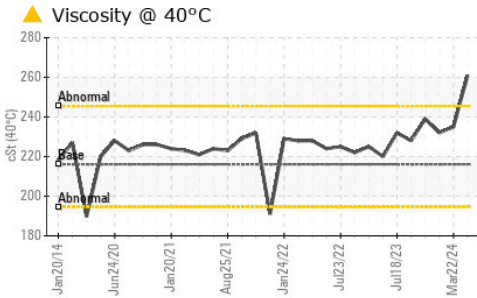
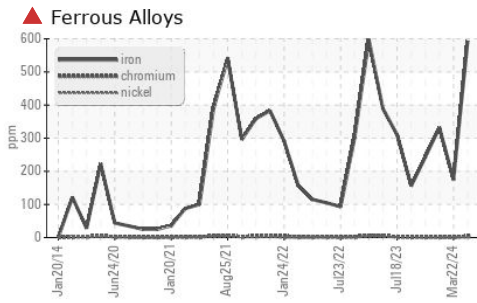
There is a moderate amount of visible silt present in the sample. The water content is negligible.

Silicon	ppm	ASTM D5185m	>60	9	8	6
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>.1	0.073	▲ 0.667	0.034
ppm Water	ppm	ASTM D6304	>1000	730	▲ 6670	350
Silt	scalar	*Visual	NONE	▲ MODER	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	>.1	0.2%	▲ 0.2%	NEG

FLUID CONDITION

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		2	<1	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		5	<1	2
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		5	1	3
Magnesium	ppm	ASTM D5185m		3	4	5
Calcium	ppm	ASTM D5185m		34	10	26
Phosphorus	ppm	ASTM D5185m	370	528	454	444
Zinc	ppm	ASTM D5185m		4	0	9
Acid Number (AN)	mg KOH/g	ASTM D8045	1.33	0.57	0.932	0.68
Visc @ 40°C	cSt	ASTM D445	216.1	▲ 261	235	232



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039773
Lab Number : 06189747
Unique Number : 11046499
Test Package : IND 2

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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)