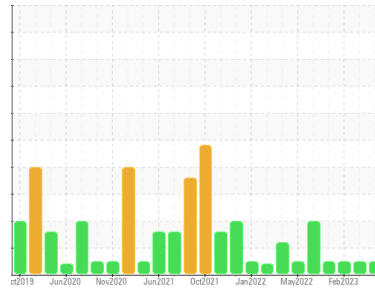




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

### 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		<b>RP0031734</b>	RP0031736	RP0031038
Sample Date	Client Info		<b>18 Jul 2023</b>	27 Mar 2023	27 Feb 2023
Machine Age	mths	Client Info	<b>0</b>	0	0
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>11</b>	3	8
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >7	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >12	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >9	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	1
Phosphorus	ppm	ASTM D5185m 370	<b>351</b>	302	319
Zinc	ppm	ASTM D5185m	<b>0</b>	0	3

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>3</b>	6	5
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	2
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Water	%	ASTM D6304	<b>0.004</b>	0.004	0.006
ppm Water	ppm	ASTM D6304 >.1	<b>44.3</b>	49.6	64.7

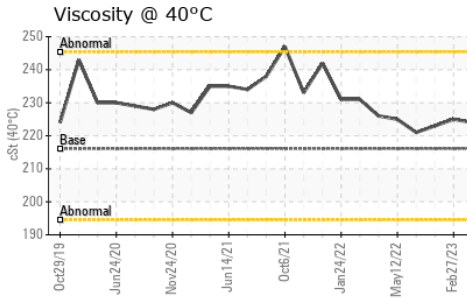
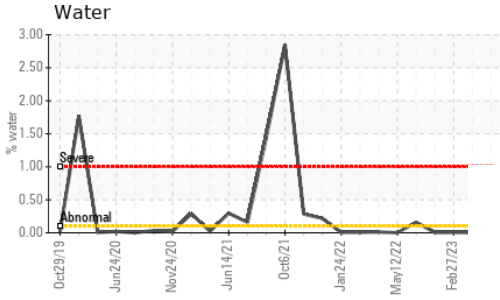
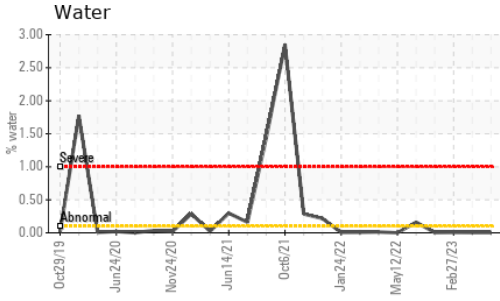
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.33	<b>0.39</b>	0.39	0.49

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

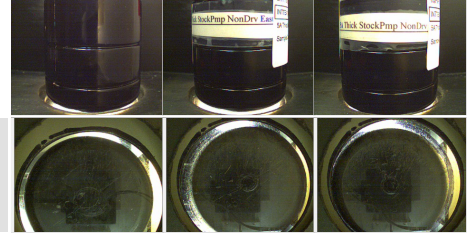
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	216.1	<b>224</b>	224	225

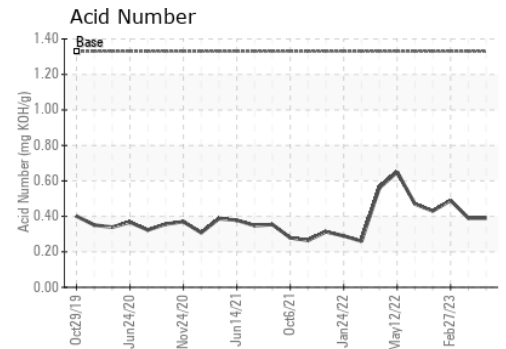
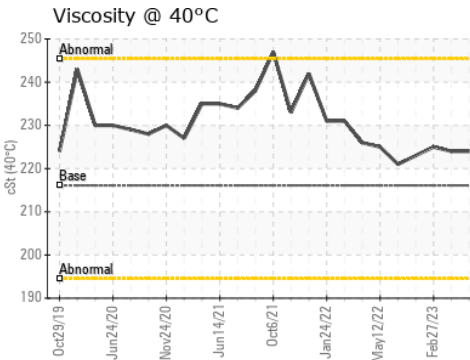
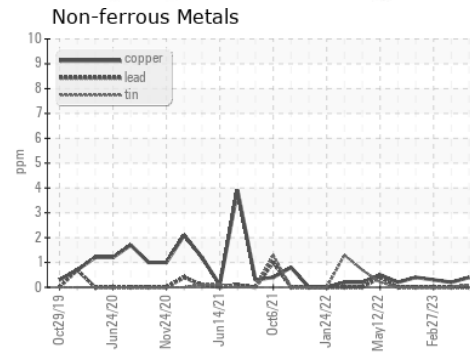
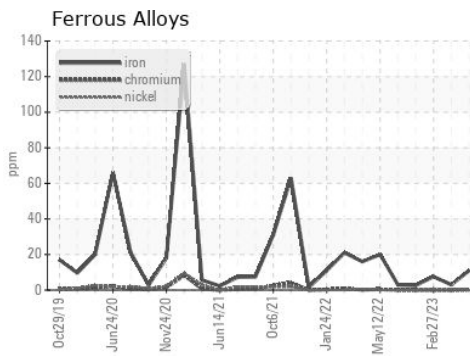
SAMPLE IMAGES		method	limit/base	current	history1	history2
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Color



Bottom

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0031734  
**Lab Number** : **05902860**  
**Unique Number** : 10564216  
**Test Package** : IND 2

**GRAPHIC PACKAGING INTERNATIONAL**  
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 F: (903)796-1969

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)