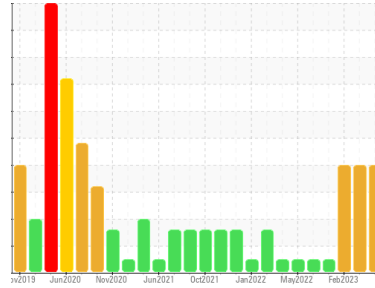




# PROBLEM SUMMARY

Sample Rating Trend



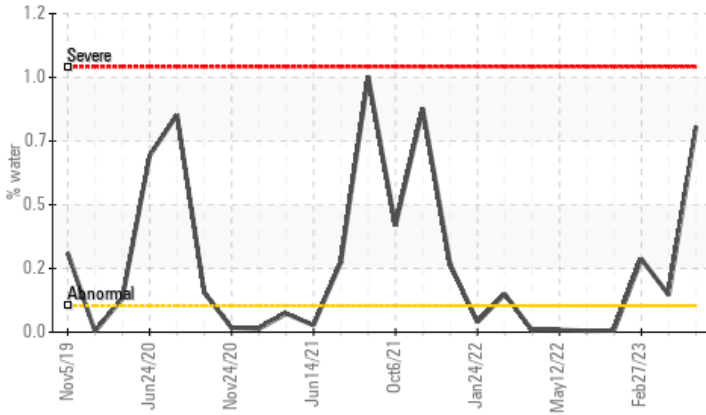
**WATER**



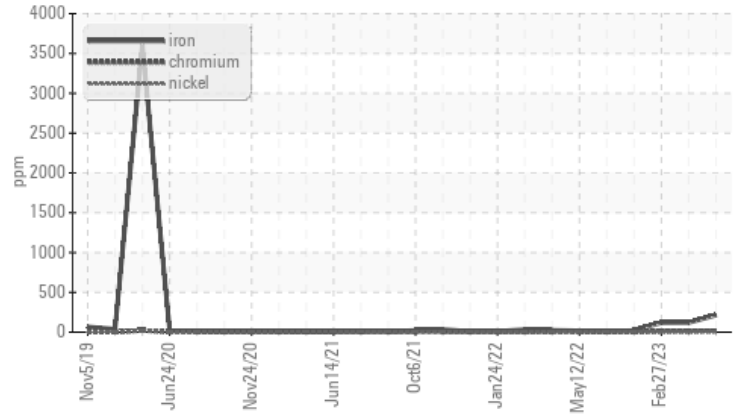
Area  
**Pulp Mill A-Line**  
 Machine Id  
**3A ThickStockPump Drive End (S/N Warren 125 HD)**  
 Component  
**Drive End Pump**  
 Fluid  
**ROYAL PURPLE SYNERGY 90/220 (5 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water



▲ Ferrous Alloys



## RECOMMENDATION

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>90	▲ 213	▲ 120	▲ 119
Chromium	ppm	ASTM D5185m	>5	▲ 14	▲ 10	▲ 11
Nickel	ppm	ASTM D5185m	>5	▲ 6	▲ 7	▲ 7
Water	%	ASTM D6304		▲ 0.775	▲ 0.140	▲ 0.276
ppm Water	ppm	ASTM D6304	>.1	▲ 7756.3	▲ 1400	▲ 2760

Customer Id: INTTEX  
 Sample No.: RP0031744  
 Lab Number: 05902858  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

### 27 Mar 2023 Diag: Don Baldrige

#### WATER



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Gear wear is indicated. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



### 27 Feb 2023 Diag: Don Baldrige

#### WATER



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Gear wear is indicated. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



### 16 Oct 2022 Diag: Don Baldrige

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

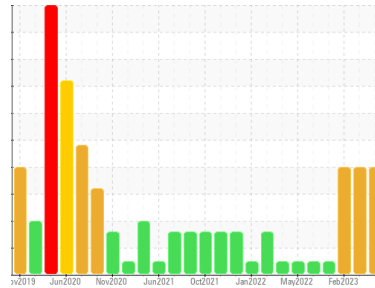
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**Pulp Mill A-Line**  
 Machine Id  
**3A ThickStockPump Drive End (S/N Warren 125 HD)**  
 Component  
**Drive End Pump**  
 Fluid  
**ROYAL PURPLE SYNERGY 90/220 (5 GAL)**

**DIAGNOSIS**

**Recommendation**

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

**Wear**

Gear wear is indicated.

**Contamination**

There is a moderate concentration of water 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		<b>RP0031744</b>	RP0031747	RP0031090
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>▲ 213</b>	▲ 120	▲ 119
Chromium	ppm	ASTM D5185m >5	<b>▲ 14</b>	▲ 10	▲ 11
Nickel	ppm	ASTM D5185m >5	<b>▲ 6</b>	▲ 7	▲ 7
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>2</b>	1	1
Lead	ppm	ASTM D5185m >12	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >30	<b>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>3</b>	<1	2
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>3</b>	2	2
Magnesium	ppm	ASTM D5185m	<b>8</b>	14	15
Calcium	ppm	ASTM D5185m	<b>12</b>	12	15
Phosphorus	ppm	ASTM D5185m 370	<b>386</b>	185	213
Zinc	ppm	ASTM D5185m	<b>0</b>	8	10

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<b>8</b>	3	5
Sodium	ppm	ASTM D5185m	<b>2</b>	1	1
Potassium	ppm	ASTM D5185m >20	<b>3</b>	1	<1
Water	%	ASTM D6304	<b>▲ 0.775</b>	▲ 0.140	▲ 0.276
ppm Water	ppm	ASTM D6304 >.1	<b>▲ 7756.3</b>	▲ 1400	▲ 2760

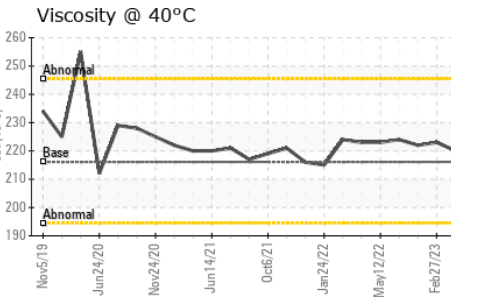
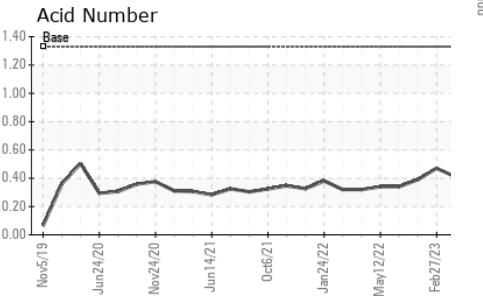
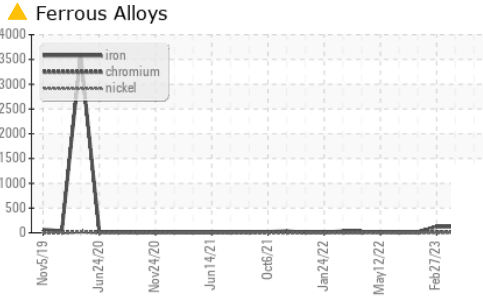
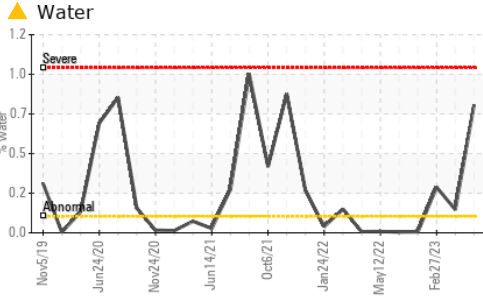
**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.33	<b>0.34</b>	0.41	0.47

**VISUAL**

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</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>	▲ 0.2%	0.2%
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

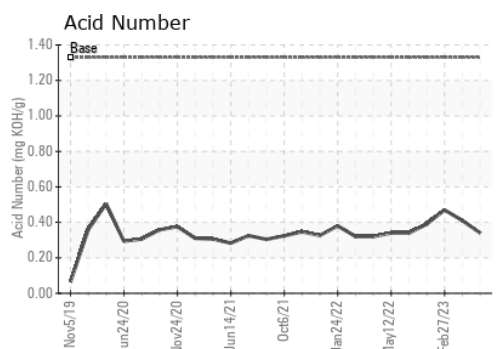
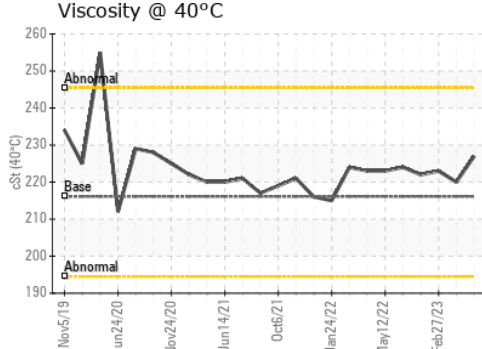
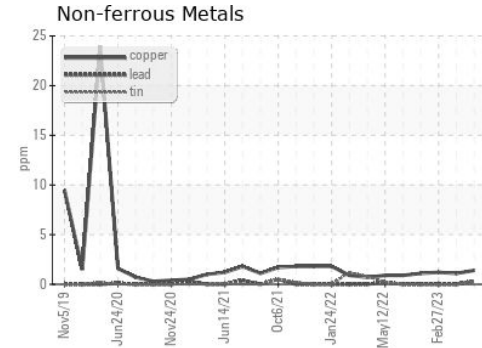
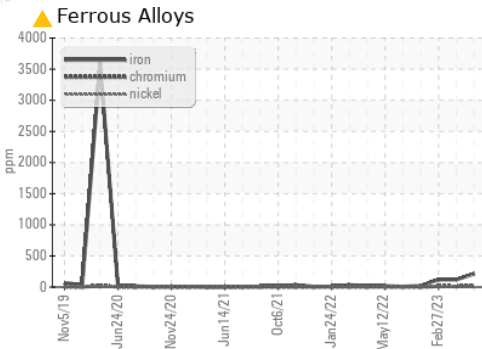


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	216.1	<b>227</b>	220	223

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0031744 **Received** : 19 Jul 2023  
**Lab Number** : **05902858** **Diagnosed** : 21 Jul 2023  
**Unique Number** : 10564214 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**GRAPHIC PACKAGING INTERNATIONAL**  
 9978 FM 3129  
 QUEEN CITY, TX  
 US 75572  
 Contact: DAVID COTHREN  
 david.cothren@graphicpkg.com  
 T: (903)796-1690  
 F: (903)796-1969

Certificate L2367  
 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)