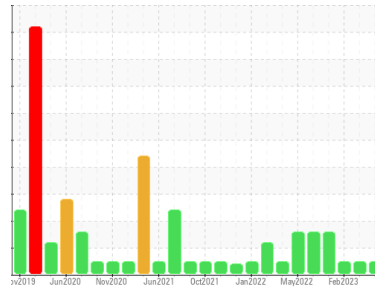




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Pulp Mill A-Line
 Machine Id
3A ThickStockPump NonDrive 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		RP0031724	RP0031727	RP0031058
Sample Date	Client Info		18 Jul 2023	27 Mar 2023	27 Feb 2023
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	42	82	79
Chromium	ppm	ASTM D5185m >5	<1	1	<1
Nickel	ppm	ASTM D5185m >5	<1	<1	<1
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	<1	1	1
Lead	ppm	ASTM D5185m >12	<1	0	0
Copper	ppm	ASTM D5185m >30	<1	<1	<1
Tin	ppm	ASTM D5185m >9	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	1	1
Magnesium	ppm	ASTM D5185m	0	4	4
Calcium	ppm	ASTM D5185m	0	2	12
Phosphorus	ppm	ASTM D5185m 370	396	401	426
Zinc	ppm	ASTM D5185m	0	2	8

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	28	24	20
Sodium	ppm	ASTM D5185m	<1	<1	1
Potassium	ppm	ASTM D5185m >20	2	<1	<1
Water	%	ASTM D6304	0.005	0.006	0.011
ppm Water	ppm	ASTM D6304 >.1	54.8	61.0	111.4

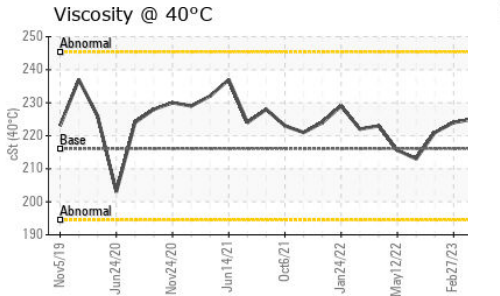
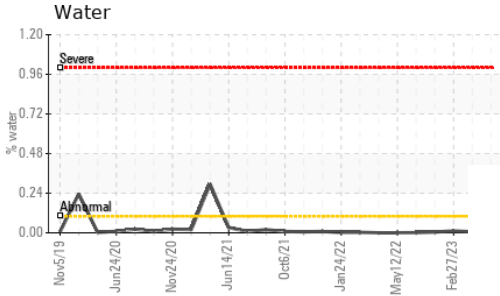
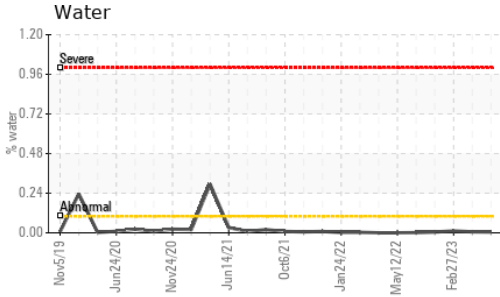
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.33	0.57	0.53	0.62

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	LIGHT	VLITE
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	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT



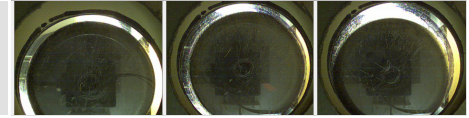
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	216.1	225	225	224

SAMPLE IMAGES		method	limit/base	current	history1	history2
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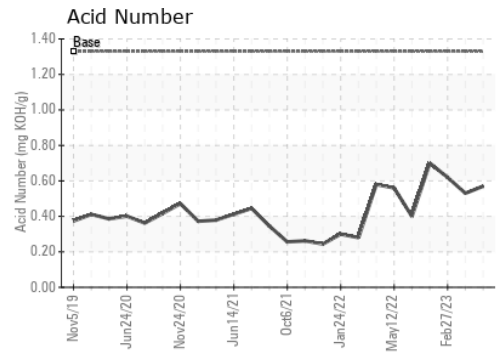
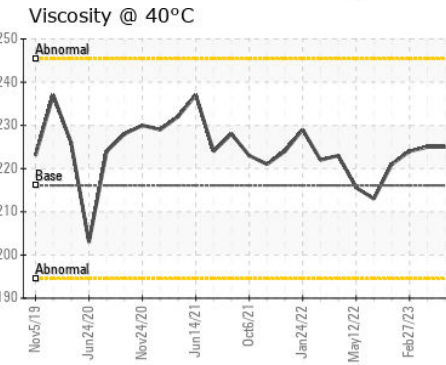
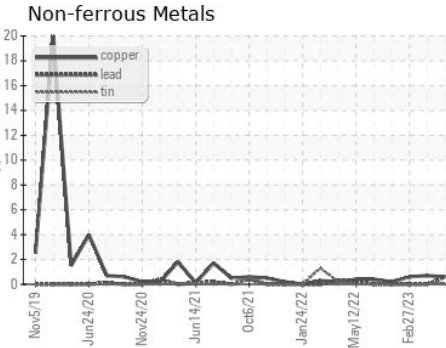
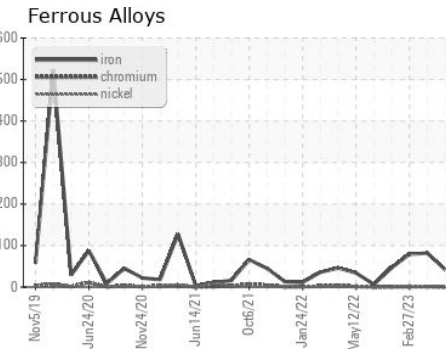
Color



Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0031724
Lab Number : **05902861**
Unique Number : 10564217
Test Package : IND 2

GRAPHIC PACKAGING INTERNATIONAL
 9978 FM 3129
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 david.cothren@graphicpkg.com
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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)