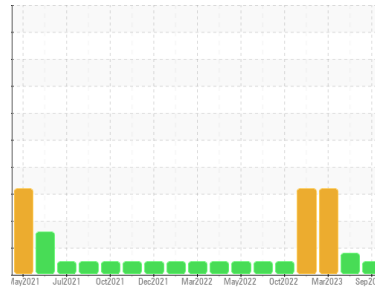




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Pulp Mill A-Line
 Machine Id
A-Line Unbleached ThickStockPmp Drive End (S/N 0241-02-05-010-030-010-030)
 Component
Pump Drive
 Fluid
ROYAL PURPLE SYNERGY 90/220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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	RP0003453	RP0031723	RP0031080
Sample Date	Client Info	28 Sep 2023	18 Jul 2023	29 Mar 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >150	112	▲ 229	69
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	4	8	19
Lead	ppm	ASTM D5185m >100	0	<1	0
Copper	ppm	ASTM D5185m >50	1	2	2
Tin	ppm	ASTM D5185m >10	0	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	3	2
Magnesium	ppm	ASTM D5185m	42	29	32
Calcium	ppm	ASTM D5185m	<1	0	10
Phosphorus	ppm	ASTM D5185m 370	63	136	160
Zinc	ppm	ASTM D5185m	5	0	13

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	3	4	5
Sodium	ppm	ASTM D5185m	<1	1	1
Potassium	ppm	ASTM D5185m >20	<1	2	<1
Water	%	ASTM D6304 >0.1	0.017	0.014	▲ 0.101
ppm Water	ppm	ASTM D6304 >1000	178.8	147.2	▲ 1010

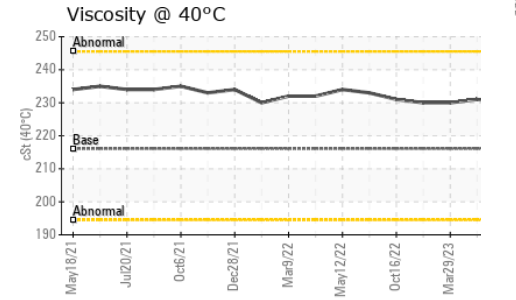
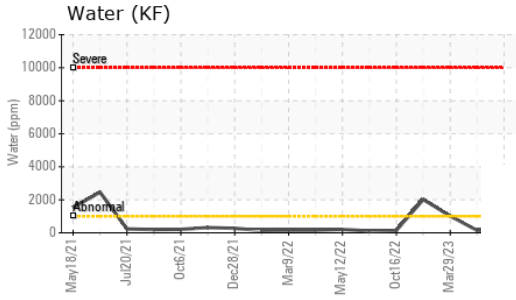
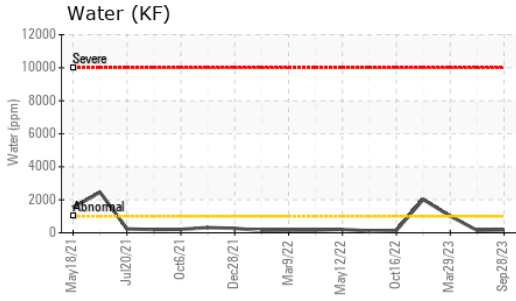
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.33	0.40	0.49	0.44

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	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 >0.1	NEG	NEG	▲ 0.2%
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT



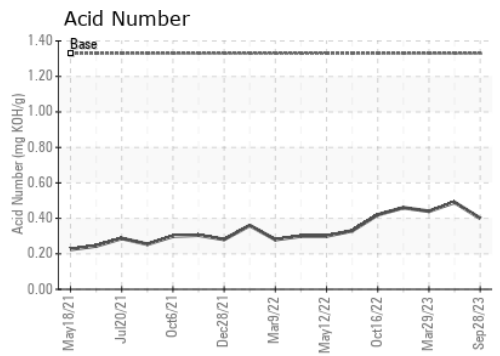
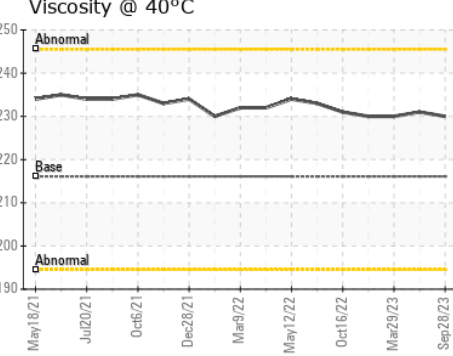
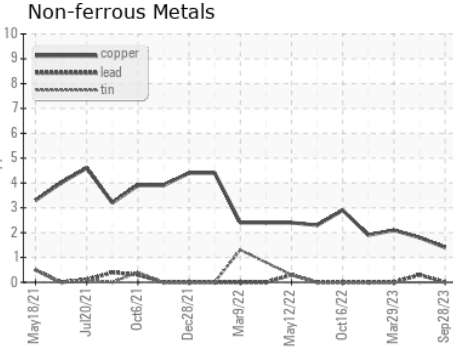
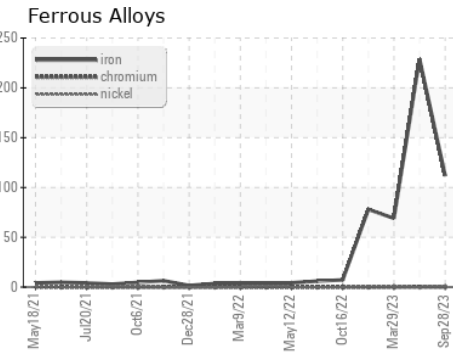
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445	216.1	230	231

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0003453
Lab Number : 05968370
Unique Number : 10674921
Test Package : IND 2

Received : 03 Oct 2023
Diagnosed : 04 Oct 2023
Diagnostician : Doug Bogart

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

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)