



**PERFORMANCE
UNDER
PRESSURE**

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
No. 1 Paper Machine
Machine Id
1 PM 2ND Cal. King Roll Drive Str.#58 (S/N MO27565-32)
Component
Gear Unit
Fluid
ROYAL PURPLE SYNERGY 90/220 (19 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP0039743	RP0039764	RP0039733
Sample Date		Client Info		16 May 2024	22 Mar 2024	29 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<1	6	0
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>100	0	<1	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

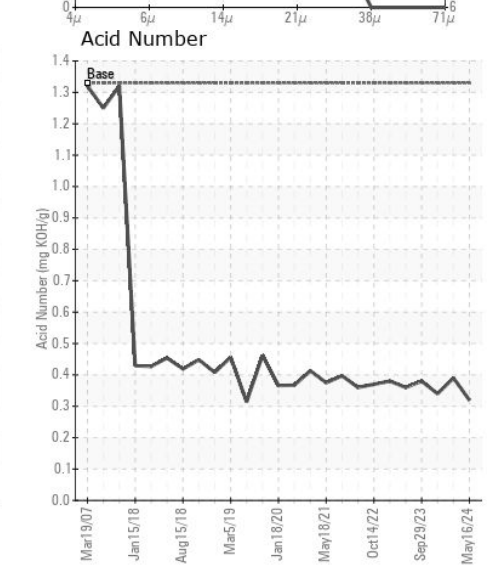
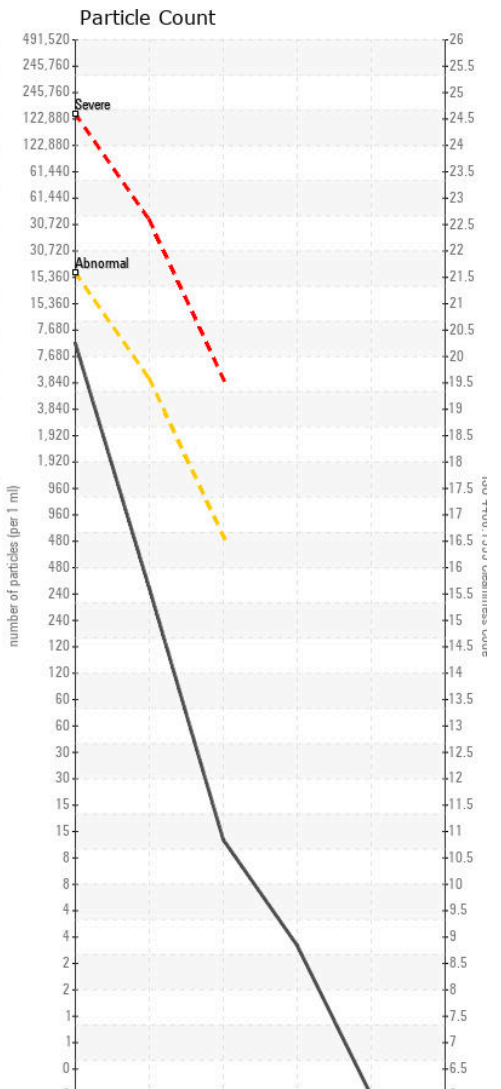
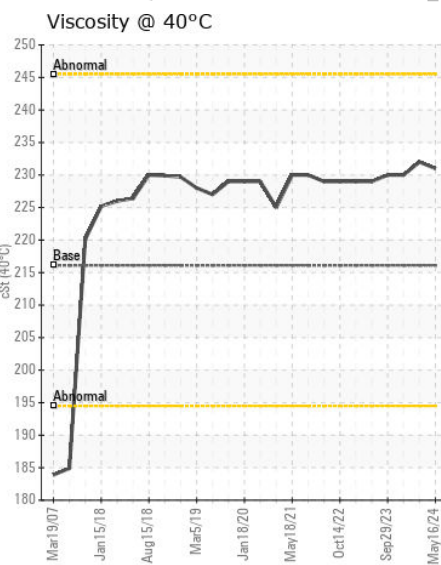
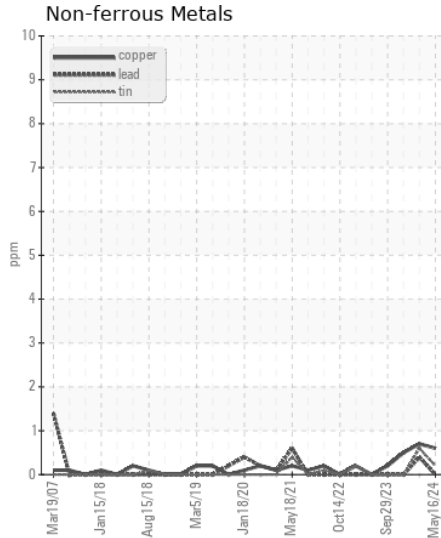
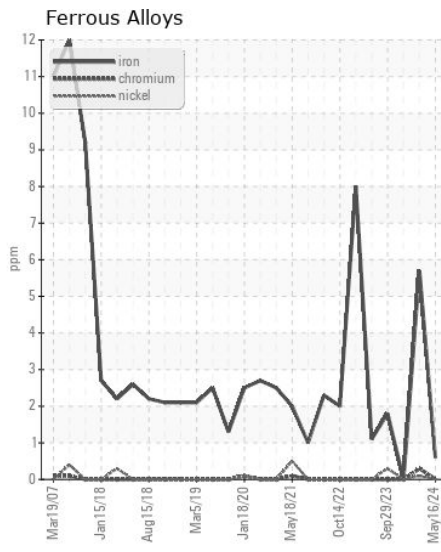
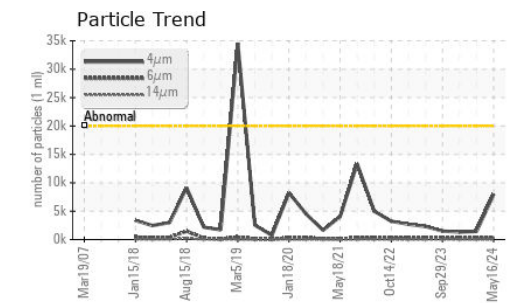
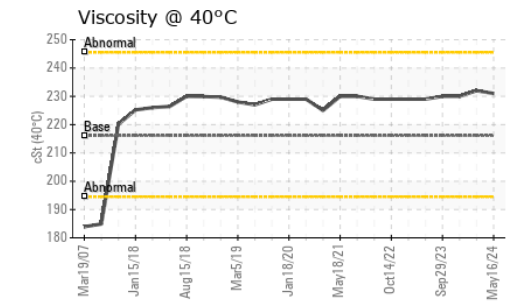
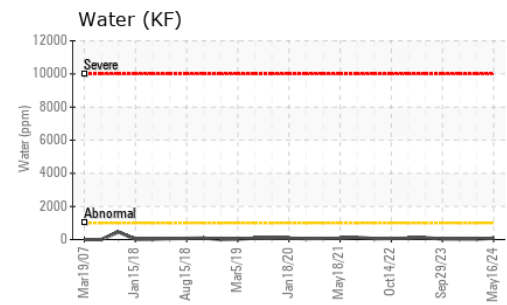
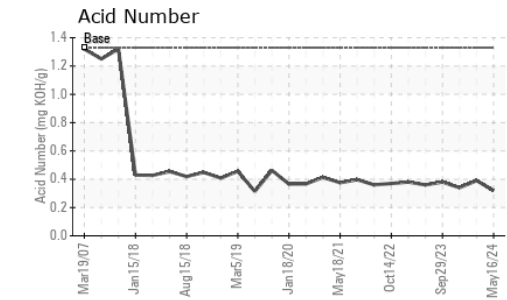
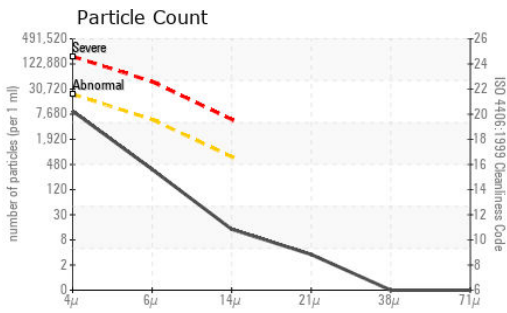
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	3	4	2
Potassium	ppm	ASTM D5185m	>20	1	1	0
Water	%	ASTM D6304	>0.1	0.008	0.003	0.003
ppm Water	ppm	ASTM D6304	>1000	83	34	36
Particles >4µm		ASTM D7647	>20000	7950	1431	1330
Particles >6µm		ASTM D7647	>5000	323	267	222
Particles >14µm		ASTM D7647	>640	12	27	27
Particles >21µm		ASTM D7647	>160	3	6	5
Particles >38µm		ASTM D7647	>40	0	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	20/16/11	18/15/12	18/15/12
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	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	0	0
Boron	ppm	ASTM D5185m		0	2	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	5	0
Calcium	ppm	ASTM D5185m		0	4	0
Phosphorus	ppm	ASTM D5185m	370	66	103	50
Zinc	ppm	ASTM D5185m		0	0	0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.33	0.32	0.39	0.34
Visc @ 40°C	cSt	ASTM D445	216.1	231	232	230



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039743
Lab Number : 06187653
Unique Number : 11044405
Test Package : IND 2 (Additional Tests: PrtCount)

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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)