IND II

ROYAL PURPLE PERFORMANCE UNDER PRESSURE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
No. 1 Paper Machine
Machine Id
1 PM 1ST Press Top Roll Drive Str# 6
Component
Gear Unit
Fluid
ROYAL PURPLE SYNERGY 90/220 (11 GAL)

RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

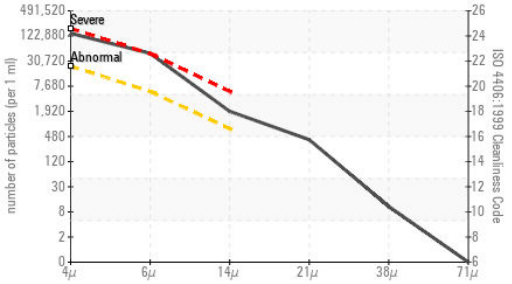
There is a high amount of particulates present in the oil.

FLUID CONDITION

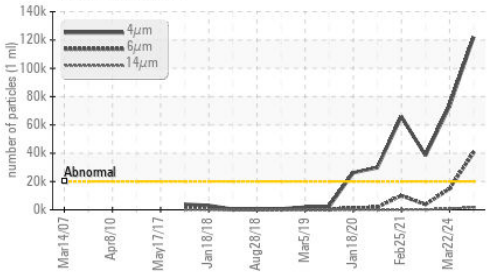
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP0039779	RP0038173	RP0031075
Sample Date		Client Info		16 May 2024	22 Mar 2024	14 Oct 2022
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				ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>150	1	<1	6
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	0	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	16	16	19
Potassium	ppm	ASTM D5185m	>20	3	<1	0
Water	%	ASTM D6304	>0.1	0.011	0.010	0.018
ppm Water	ppm	ASTM D6304	>1000	118	109	186.7
Particles >4µm		ASTM D7647	>20000	▲ 122059	▲ 73030	● 38410
Particles >6µm		ASTM D7647	>5000	▲ 40599	▲ 14977	3810
Particles >14µm		ASTM D7647	>640	▲ 1679	▲ 808	220
Particles >21µm		ASTM D7647	>160	▲ 354	▲ 213	58
Particles >38µm		ASTM D7647	>40	9	8	4
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 24/23/18	▲ 23/21/17	● 22/19/15
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
Sodium	ppm	ASTM D5185m		1	<1	0
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	0	0
Magnesium	ppm	ASTM D5185m		0	0	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m	370	8	9	16
Zinc	ppm	ASTM D5185m		0	0	0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.33	1.18	1.36	0.95
Visc @ 40°C	cSt	ASTM D445	216.1	245	247	236

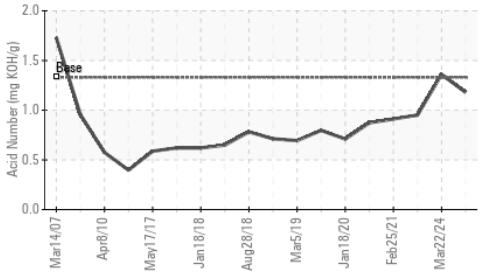
Particle Count



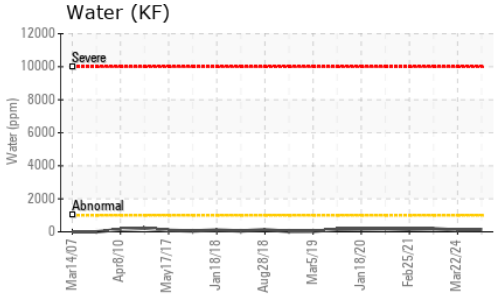
Particle Trend



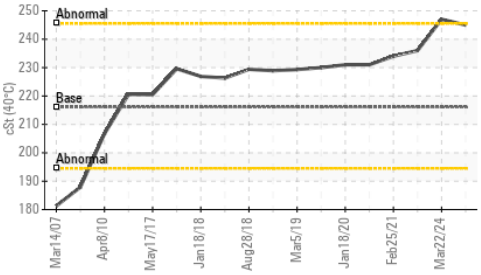
Acid Number



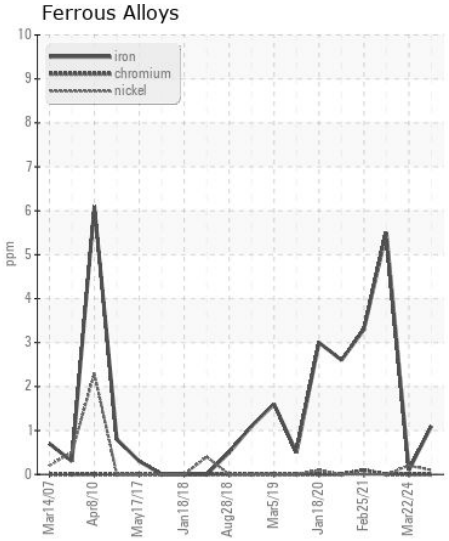
Water (KF)



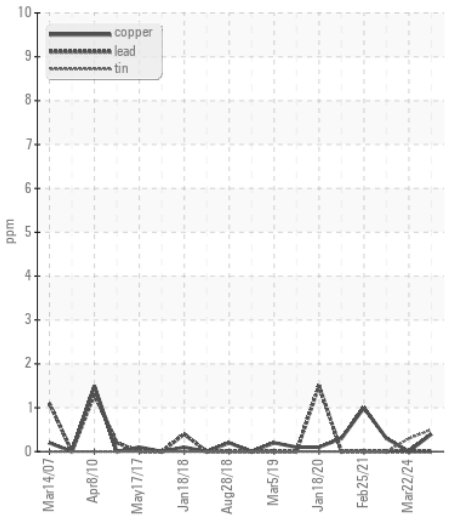
Viscosity @ 40°C



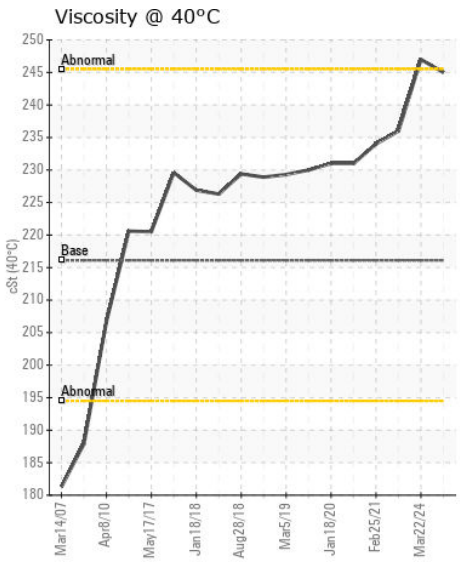
Ferrous Alloys



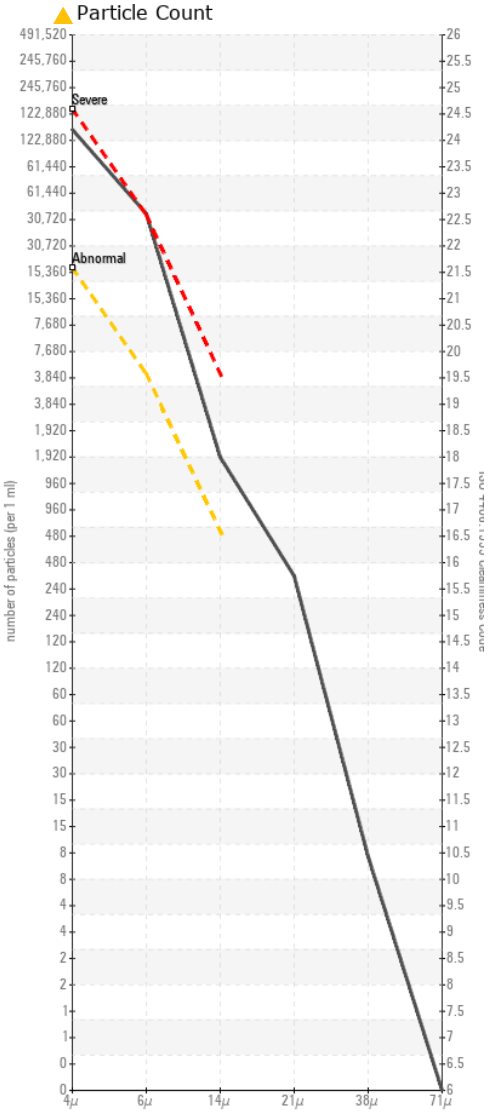
Non-ferrous Metals



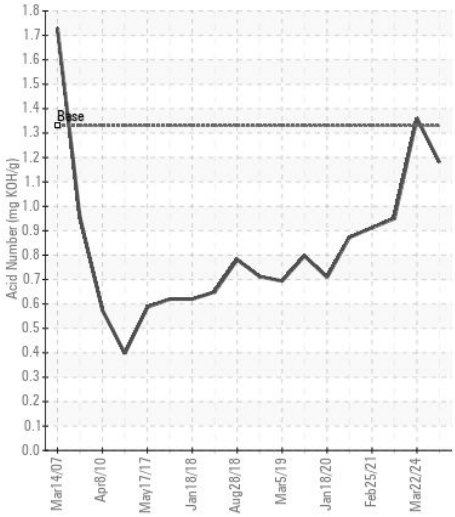
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: RP0039779	**Received**	: 22 May 2024
Lab Number	: 06187644	**Tested**	: 23 May 2024
Unique Number	: 11044396	**Diagnosed**	: 24 May 2024 - Don Baldridge
Test Package	: IND 2 (Additional Tests: PrtCount)		

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)

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