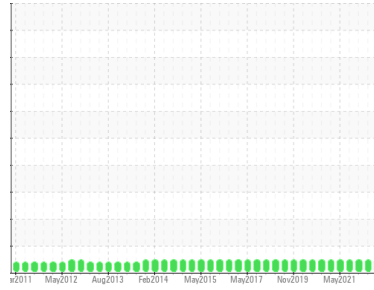




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Banbury 1**  
 Machine Id  
**BB01 Philly**  
 Component  
**Gearbox**  
 Fluid  
**SHELL OMALA S2 G 320 (720 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### 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		<b>WC0754390</b>	WC0664079	WC0636013
Sample Date	Client Info		<b>05 Feb 2023</b>	27 Oct 2022	05 Nov 2021
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	13
Iron	ppm	ASTM D5185(m) >200	<b>7</b>	7	6
Chromium	ppm	ASTM D5185(m) >15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >200	<b>4</b>	4	4
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 5.5	<b>2</b>	<1	2
Barium	ppm	ASTM D5185(m) 0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0.5	<b>7</b>	7	7
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 23	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185(m) 13	<b>3</b>	4	4
Phosphorus	ppm	ASTM D5185(m) 450	<b>310</b>	312	305
Zinc	ppm	ASTM D5185(m) 9.9	<b>13</b>	14	13
Sulfur	ppm	ASTM D5185(m) 8181	<b>8309</b>	7953	7999
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

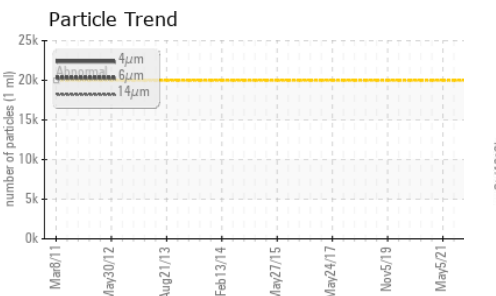
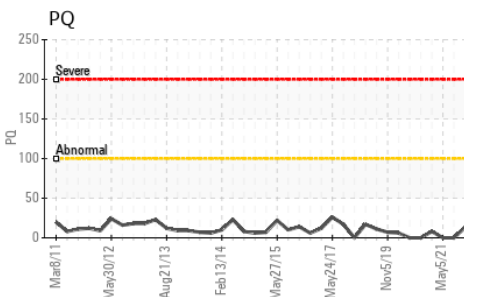
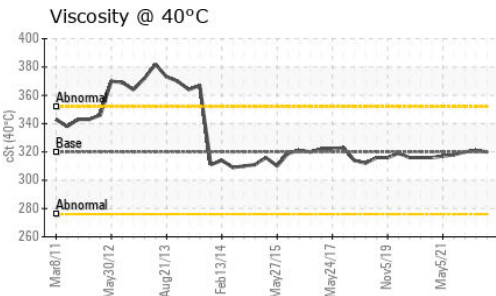
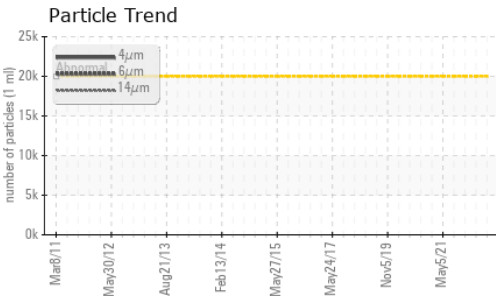
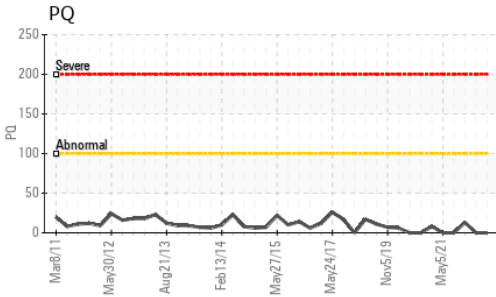
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>2</b>	2	<1
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>8866</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>1112</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>14</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>2</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>20/17/11</b>	---	---



# OIL ANALYSIS REPORT

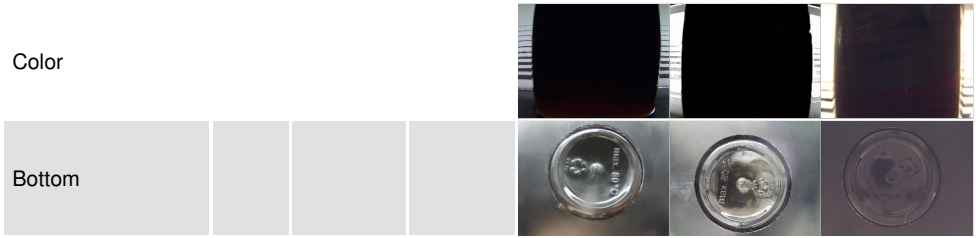


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.95</b>	0.91	0.83

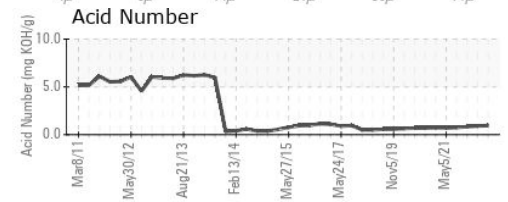
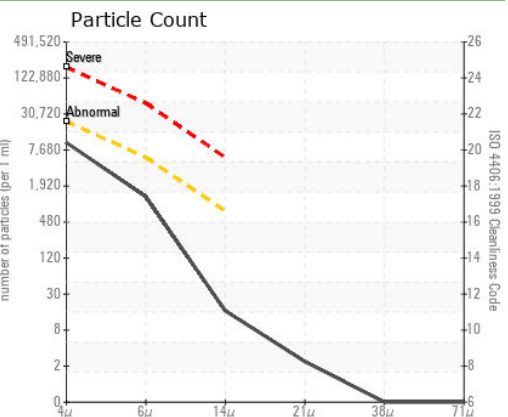
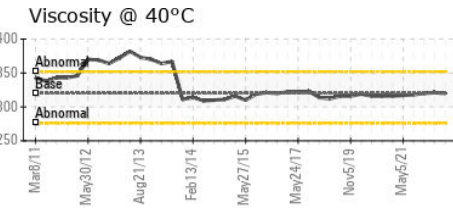
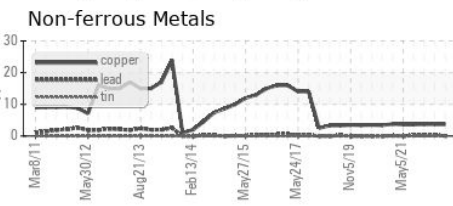
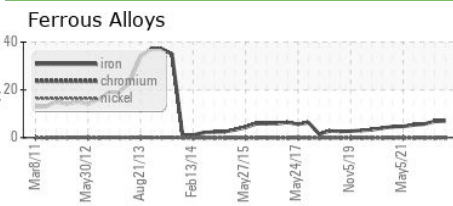
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
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*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	<b>320</b>	321	320

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0754390 **Received** : 06 Feb 2023  
**Lab Number** : 02537626 **Diagnosed** : 28 Mar 2023  
**Unique Number** : 5526626 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: PQ, TAN Man )

**Goodyear Napanee**  
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 steve.cote@goodyear.com  
 T: (613)354-7739  
 F: (613)354-7798

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.