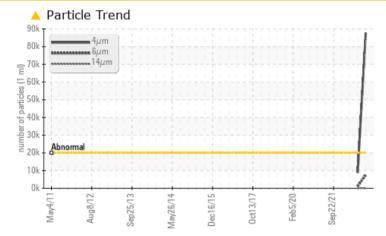


PROBLEM SUMMARY

Area Banbury 1 Machine Id BB01 Philly Component

Gearbox Fluid SHELL OMALA S2 G 320 (720 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS							
Sample Status			ABNORMAL	NORMAL	NORMAL		
Particles >4µm	ASTM D7647	>20000	<u> </u>	8866			
Particles >6µm	ASTM D7647	>5000	<u> </u>	1112			
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<u> </u>	20/17/11			

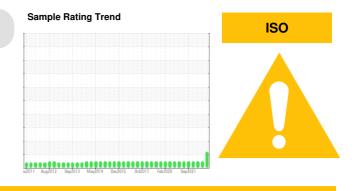
Customer Id: GOONAP Sample No.: WC0841265 Lab Number: 02579782 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED ACTIONS						
Action	Status	Date	Done By	Description		
Change Filter			?	We recommend you service the filters on this component.		
Resample			?	We recommend an early resample to monitor this condition.		

HISTORICAL DIAGNOSIS



05 Feb 2023 Diag: Wes Davis

Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

27 Oct 2022 Diag: Wes Davis



 \checkmark

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

05 Nov 2021 Diag: Wes Davis





Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Area Banbury 1 BB01 Philly

Component Gearbox Fluic SHELL OMALA S2 G 320 (720 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

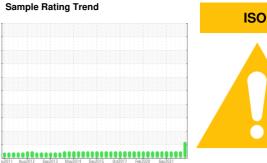
All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

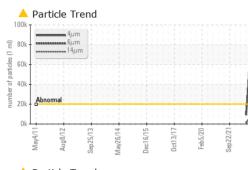
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

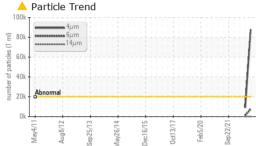


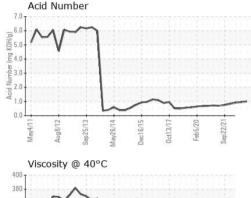
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0841265	WC0754390	WC0664079
Sample Date		Client Info		25 Aug 2023	05 Feb 2023	27 Oct 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	8	7	7
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>15	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>100	0	0	<1
Copper	ppm	ASTM D5185(m)	>200	3	4	4
Tin	ppm	ASTM D5185(m)	>25	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)	. •	0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	nnm	ASTM D5185(m)	5.5	2	2	<1
Barium	ppm	ASTM D5185(m)	0.4	0	0	0
Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)	0.4	7	7	7
Manganese	ppm ppm	ASTM D5185(m)	0.5	0	0	0
Manganese		ASTM D5185(m)	23	۰ <1	0	<1
Calcium	ppm	ASTM D5185(m)	13	5	3	4
	ppm		450	295	310	312
Phosphorus Zinc	ppm	ASTM D5185(m) ASTM D5185(m)	9.9	295 13	13	14
Sulfur	ppm			7972	8309	
	ppm	ASTM D5185(m)	8181			7953
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		2	2	2
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	A 87815	8866	
Particles >6µm		ASTM D7647	>5000	<u> </u>	1112	
Particles >14µm		ASTM D7647	>640	62	14	
Particles >21µm		ASTM D7647	>160	17	2	
Particles >38µm		ASTM D7647	>40	2	0	
Particles >71µm		ASTM D7647	>10	1	0	
Oil Cleanliness		ISO 4406 (c)	>21/19/16	4 24/20/13	20/17/11	
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		1.00	0.95	0.91
3:32:29) Rev: 1						Submitted By: ?

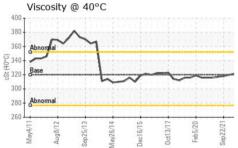


OIL ANALYSIS REPORT









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*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	319	320	321
SAMPLE IMAGES	SAMPLE IMAGES		limit/base	current	history1	history2
Color						
Bottom						

40

30

H 20

10

0

2!

20

15

Maw

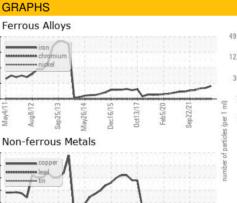
400

() 350 () 350 () 350 () 350 B Abno

250

Mav4/1 Aug 8/17

Maw4/1



Jec16/15

Dec16/15

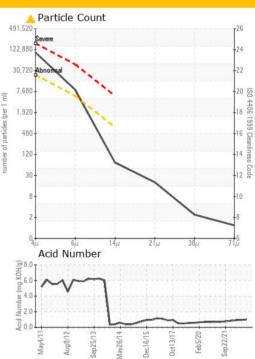
Feb5/20. Sep22/21-

Sep25/

Sep25/13

Mav26/1

Viscosity @ 40°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : WC0841265 Received : 31 Aug 2023 : 01 Sep 2023 Lab Number : 02579782 Diagnosed ISO 17025:2017 Accredited Laboratory : 5632842 Diagnostician : Wes Davis Unique Number Test Package : IND 2 (Additional Tests: TAN Man) 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.

Goodyear Napanee 388 GOODYEAR ROAD NAPANEE, ON CA K7R 3L2 Contact: Steve Cote steve.cote@goodyear.com T: (613)354-7739 F: (613)354-7798

Report Id: GOONAP [WCAMIS] 02579782 (Generated: 09/01/2023 08:32:29) Rev: 1

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Submitted By: ?

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