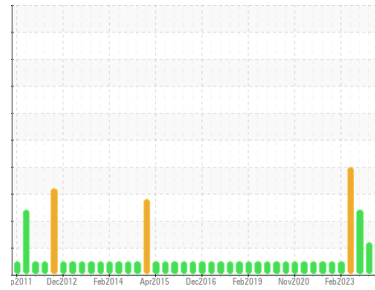




PROBLEM SUMMARY

Area
Banbury 2
 Machine Id
BB02 South Ext Bott
 Component
Gearbox
 Fluid
SHELL OMALA S2 G 220 (40 GAL)

Sample Rating Trend

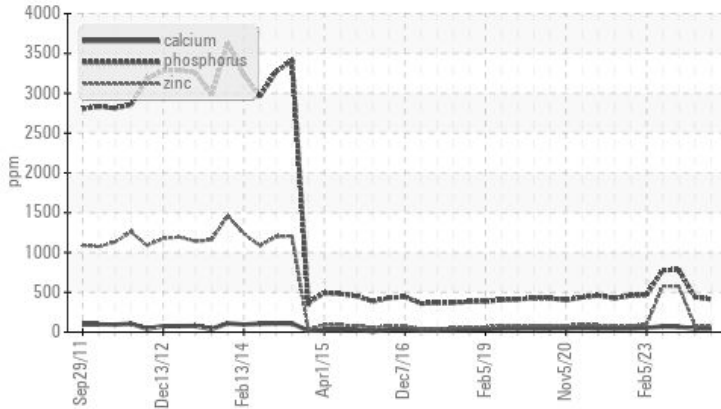


ADDITIVES



COMPONENT CONDITION SUMMARY

▲ Additives



RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ABNORMAL
Molybdenum	ppm	ASTM D5185(m)	0	▲ 269	▲ 255	0
Calcium	ppm	ASTM D5185(m)	0	▲ 45	▲ 43	▲ 67
Zinc	ppm	ASTM D5185(m)	0	▲ 84	▲ 83	▲ 577

Customer Id: GOONAP
 Sample No.: WC0873594
 Lab Number: 02602401
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

25 Aug 2023 Diag: Kevin Marson

ADDITIVES



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



25 Apr 2023 Diag: Kevin Marson

VISCOSITY



Due to this condition we recommend the following action... We advise an early resample to confirm this situation. NOTE: The current sample results do not match this units historical trend, indicating the sample may not be from this component/unit. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid.

view report



25 Apr 2023 Diag: Kevin Marson

DIRT



We advise that you check all areas where dirt can enter the system. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is a moderate concentration of dirt present in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

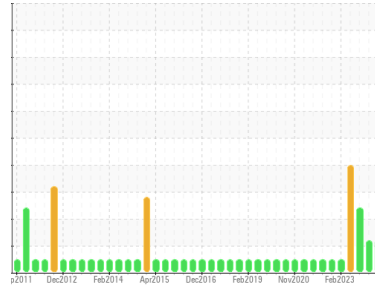
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Area
Banbury 2
 Machine Id
BB02 South Ext Bott
 Component
Gearbox
 Fluid
SHELL OMALA S2 G 220 (40 GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. 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	WC0873594	WC0841272	WC0299464
Sample Date	Client Info	05 Nov 2023	25 Aug 2023	25 Apr 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		ATTENTION	ATTENTION	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	0	0
Iron	ppm ASTM D5185(m) >200	12	11	37
Chromium	ppm ASTM D5185(m) >15	0	0	<1
Nickel	ppm ASTM D5185(m) >15	0	0	2
Titanium	ppm ASTM D5185(m)	0	0	<1
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >25	<1	<1	10
Lead	ppm ASTM D5185(m) >100	0	0	17
Copper	ppm ASTM D5185(m) >200	1	1	128
Tin	ppm ASTM D5185(m) >25	0	0	<1
Antimony	ppm ASTM D5185(m) >5	0	0	0
Vanadium	ppm ASTM D5185(m)	0	0	<1
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	<1

ADDITIVES

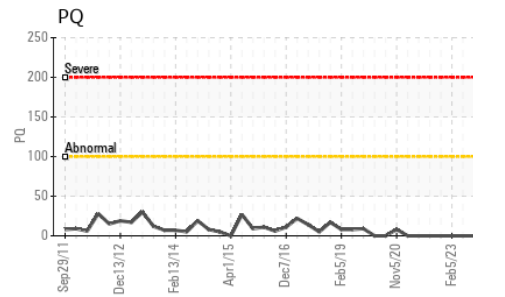
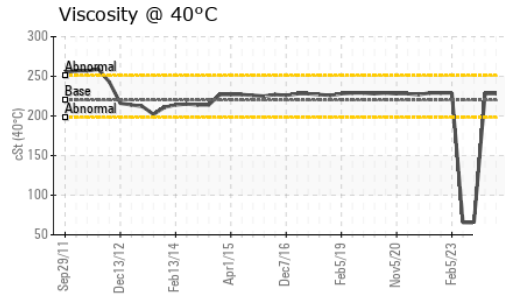
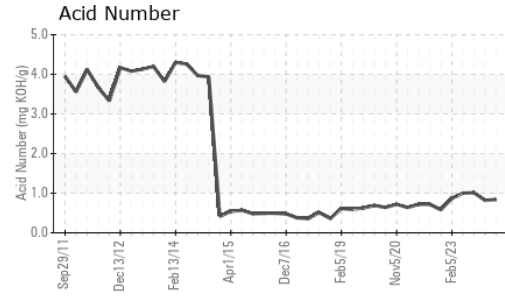
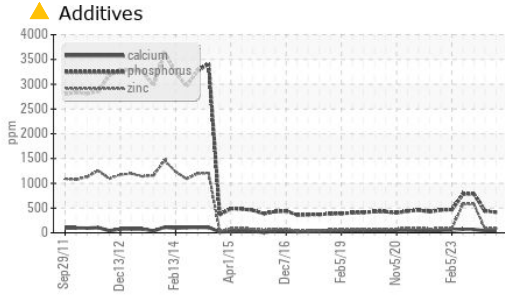
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 4.4	2	2	2
Barium	ppm ASTM D5185(m) 0.0	<1	0	<1
Molybdenum	ppm ASTM D5185(m) 0	▲ 269	▲ 255	0
Manganese	ppm ASTM D5185(m)	0	<1	<1
Magnesium	ppm ASTM D5185(m) 0	2	2	▲ 36
Calcium	ppm ASTM D5185(m) 0	▲ 45	▲ 43	▲ 67
Phosphorus	ppm ASTM D5185(m) 215	413	441	▲ 785
Zinc	ppm ASTM D5185(m) 0	▲ 84	▲ 83	▲ 577
Sulfur	ppm ASTM D5185(m) 7039	8679	8844	▲ 2329
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >50	12	15	17
Sodium	ppm ASTM D5185(m)	1	<1	8
Potassium	ppm ASTM D5185(m) >20	0	<1	1

FLUID DEGRADATION

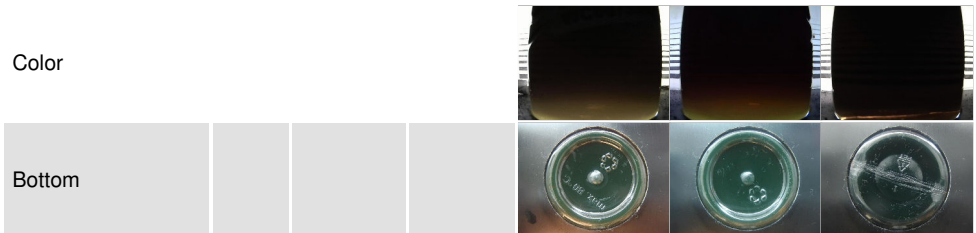
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.84	0.82	1.01



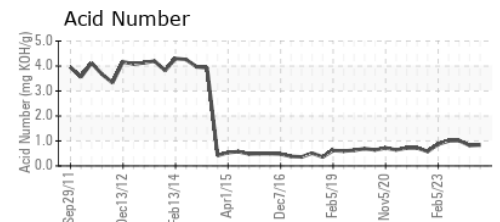
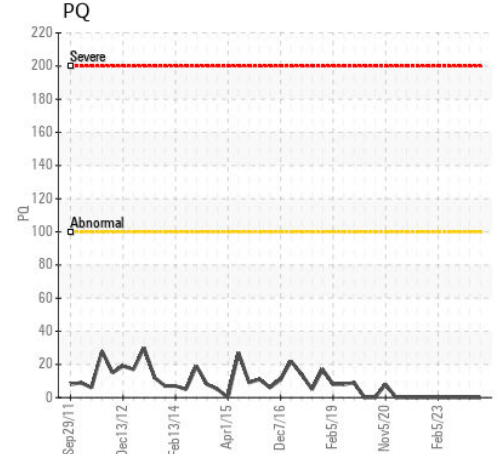
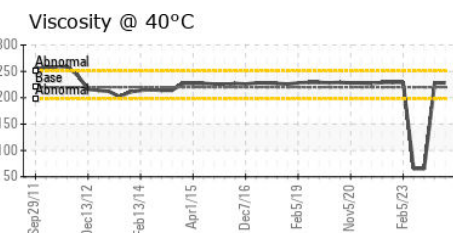
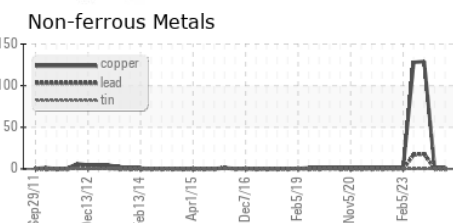
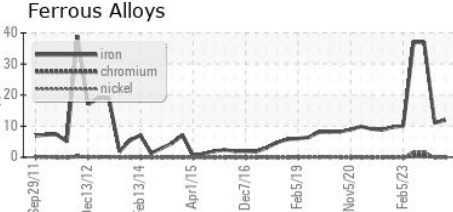
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	228	▲ 65.3

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. : WC0873594 **Received** : 11 Dec 2023
Lab Number : 02602401 **Diagnosed** : 12 Dec 2023
Unique Number : 5695486 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: TAN Man)

Goodyear Napanee
 388 Goodyear Road
 Napanee, ON
 CA K7R 3L2
 Contact: Mohammad Waleed
 Mohammad_Waleed@goodyear.com
 T: (613)354-7709
 F: (613)354-9377

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.