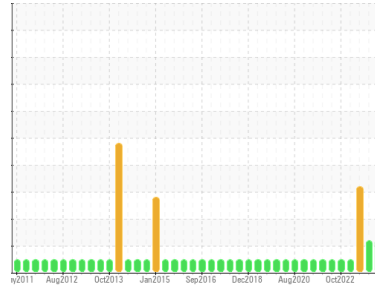




PROBLEM SUMMARY

Sample Rating Trend



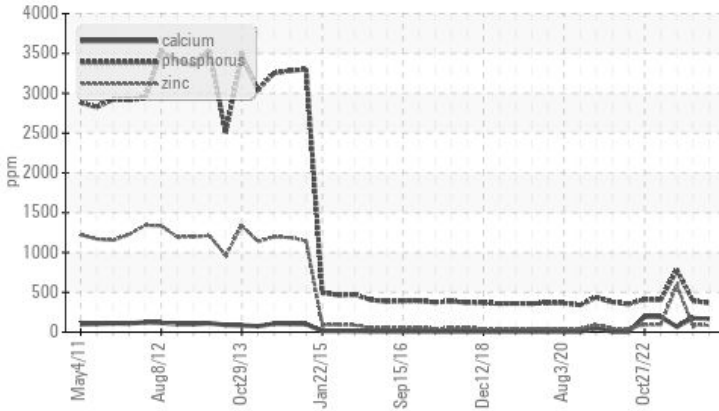
ADDITIVES



Area
Banbury 2
 Machine Id
BB02 North Ext Top
 Component
Gearbox
 Fluid
SHELL OMALA 220 (40 GAL)

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	▲ 84	▲ 84	0
Calcium	ppm	ASTM D5185(m)	0	▲ 167	▲ 175	▲ 68
Zinc	ppm	ASTM D5185(m)	0	▲ 85	▲ 89	▲ 587

Customer Id: GOONAP
 Sample No.: WC0873592
 Lab Number: 02602399
 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

WEAR



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. Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated. 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. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



05 Feb 2023 Diag: Kevin Marson

NORMAL



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

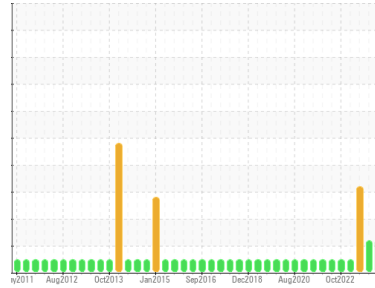
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Area
Banbury 2
 Machine Id
BB02 North Ext Top
 Component
Gearbox
 Fluid
SHELL OMALA 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		WC0873592	WC0841270	WC22128044
Sample Date	Client Info		05 Nov 2023	25 Aug 2023	25 Apr 2023
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			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	11	10	38
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	7
Lead	ppm	ASTM D5185(m) >100	1	<1	18
Copper	ppm	ASTM D5185(m) >200	2	2	▲ 137
Tin	ppm	ASTM D5185(m) >25	0	0	<1
Antimony	ppm	ASTM D5185(m) >5	0	0	<1
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

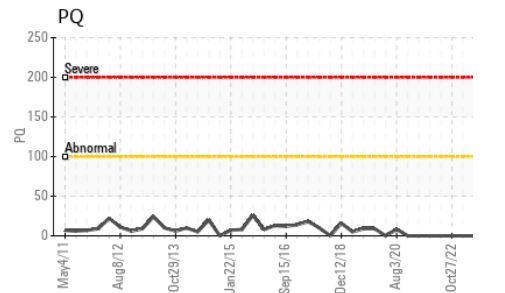
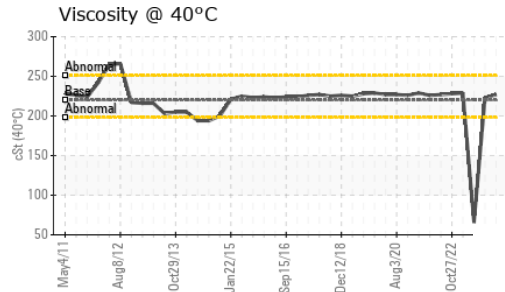
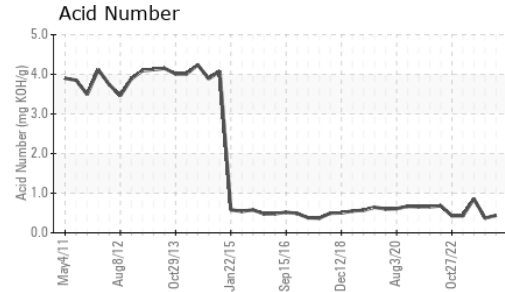
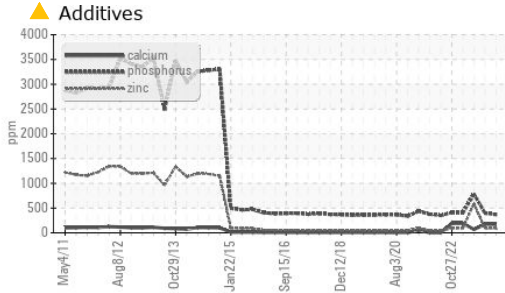
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 4.4	2	2	<1
Barium	ppm	ASTM D5185(m) 0.0	<1	0	<1
Molybdenum	ppm	ASTM D5185(m) 0	▲ 84	▲ 84	0
Manganese	ppm	ASTM D5185(m)	0	0	<1
Magnesium	ppm	ASTM D5185(m) 0	1	1	▲ 31
Calcium	ppm	ASTM D5185(m) 0	▲ 167	▲ 175	▲ 68
Phosphorus	ppm	ASTM D5185(m) 215	367	394	▲ 782
Zinc	ppm	ASTM D5185(m) 0	▲ 85	▲ 89	▲ 587
Sulfur	ppm	ASTM D5185(m) 7039	8472	8484	▲ 2363
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	11	11	16
Sodium	ppm	ASTM D5185(m)	<1	<1	2
Potassium	ppm	ASTM D5185(m) >20	0	0	<1

FLUID DEGRADATION

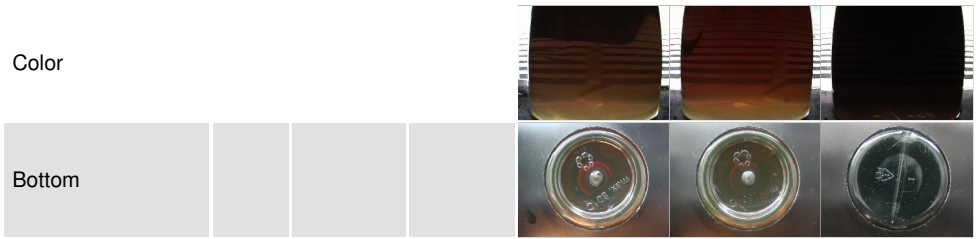
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.44	0.37	0.86



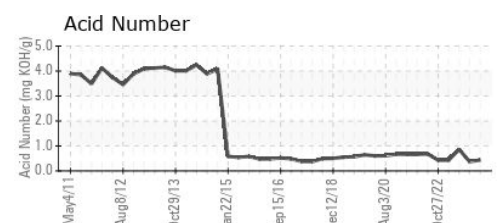
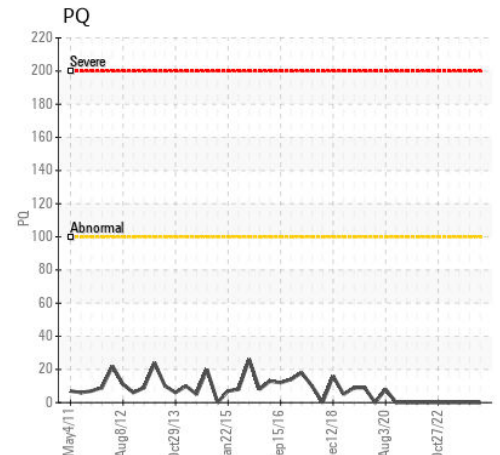
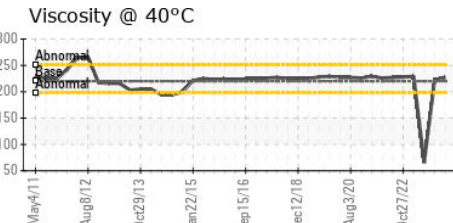
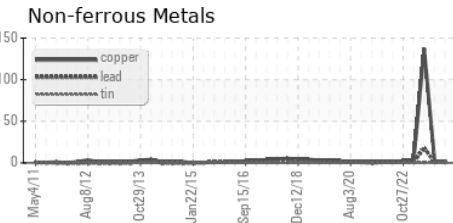
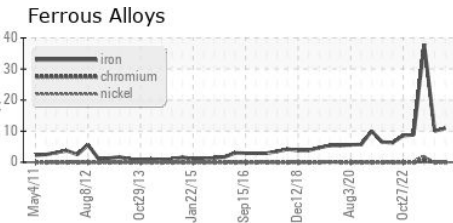
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	227	223 ▲ 65.8

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. : WC0873592 **Received** : 11 Dec 2023
Lab Number : 02602399 **Diagnosed** : 12 Dec 2023
Unique Number : 5695484 **Diagnostician** : Kevin Marson
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: Mohammad Waleed
 Mohammad_Waleed@goodyear.com
 T: (613)354-7709
 F: (613)354-9377