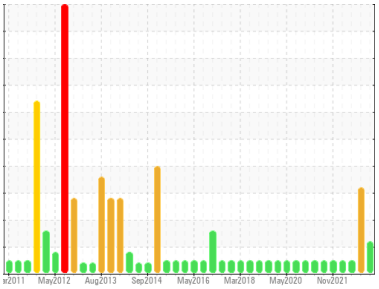
PROBLEM SUMMARY

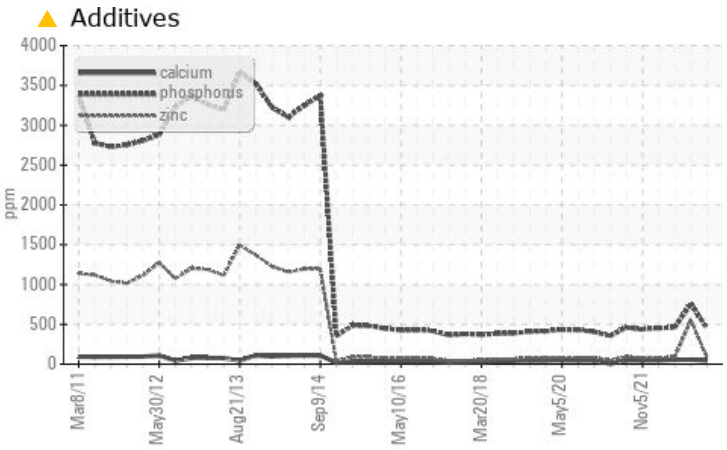
Sample Rating Trend



ADDITIVES

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

COMPONENT CONDITION SUMMARY



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	ABNORMAL	NORMAL
Molybdenum	ppm	ASTM D5185(m)	0	▲ **261**	0	267
Calcium	ppm	ASTM D5185(m)	0	▲ **44**	▲ 57	55
Zinc	ppm	ASTM D5185(m)	0	▲ **85**	▲ 551	89

Customer Id: GOONAP
Sample No.: WC0841273
Lab Number: 02579783
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 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 ISO 150 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

27 Oct 2022 Diag: Kevin Marson

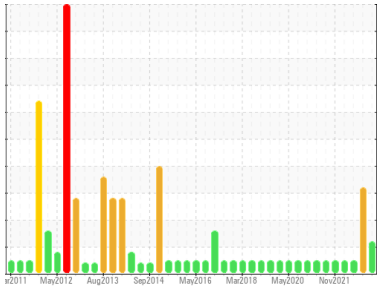
NORMAL

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 South Ext Top
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		**WC0841273**	WC0299465	WC0754398
Sample Date		Client Info		**25 Aug 2023**	25 Apr 2023	05 Feb 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**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>200	**11**	34	10
Chromium	ppm	ASTM D5185(m)	>15	**0**	<1	0
Nickel	ppm	ASTM D5185(m)	>15	**0**	2	0
Titanium	ppm	ASTM D5185(m)		**0**	<1	0
Silver	ppm	ASTM D5185(m)		**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	**<1**	6	2
Lead	ppm	ASTM D5185(m)	>100	**<1**	18	<1
Copper	ppm	ASTM D5185(m)	>200	**1**	▲ 135	1
Tin	ppm	ASTM D5185(m)	>25	**0**	<1	0
Antimony	ppm	ASTM D5185(m)	>5	**<1**	<1	0
Vanadium	ppm	ASTM D5185(m)		**0**	<1	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	<1	0

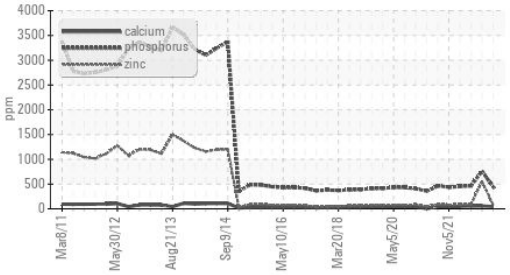
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.4	**2**	1	2
Barium	ppm	ASTM D5185(m)	0.0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	▲ **261**	0	267
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	**1**	▲ 28	2
Calcium	ppm	ASTM D5185(m)	0	▲ **44**	▲ 57	55
Phosphorus	ppm	ASTM D5185(m)	215	**448**	▲ 759	462
Zinc	ppm	ASTM D5185(m)	0	▲ **85**	▲ 551	89
Sulfur	ppm	ASTM D5185(m)	7039	**8800**	▲ 2250	8983
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**12**	17	12
Sodium	ppm	ASTM D5185(m)		**<1**	7	1
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	0

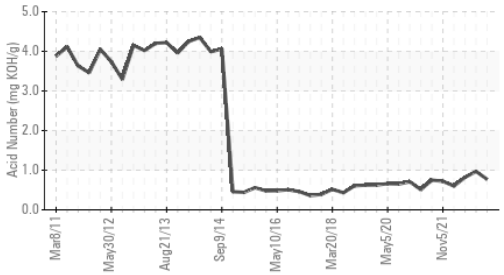
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.77**	0.97	0.82

OIL ANALYSIS REPORT

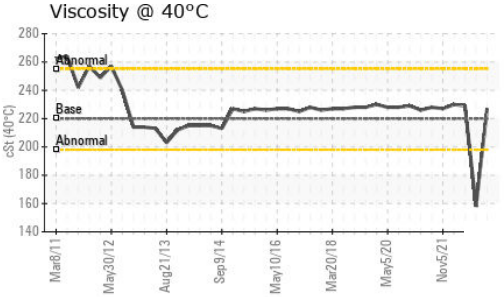
Additives



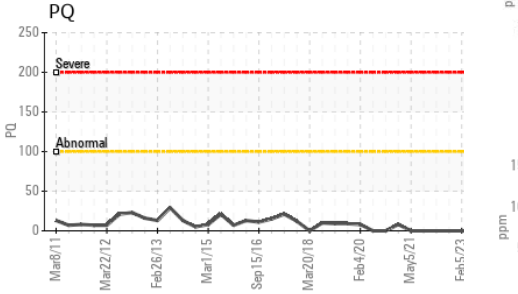
Acid Number



Viscosity @ 40°C



PQ



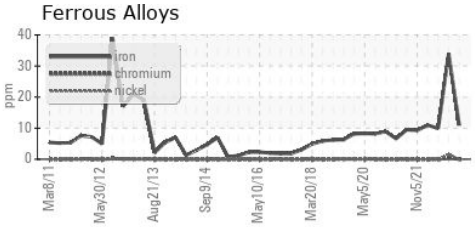
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Sand/Dirt	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)	220	**227**	▲ 158	229

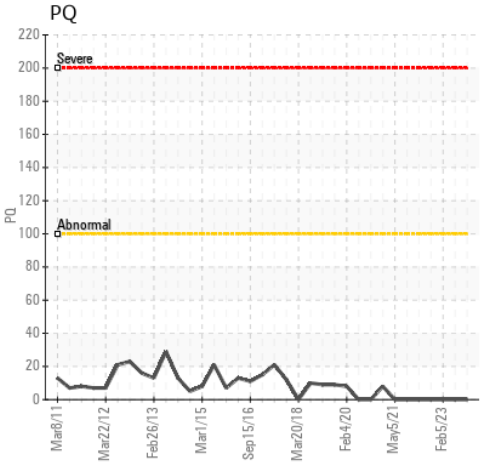
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

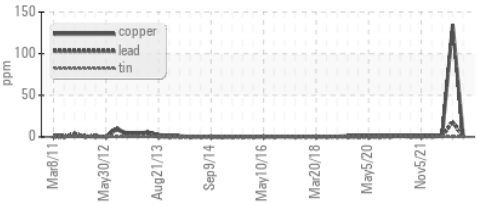
Ferrous Alloys



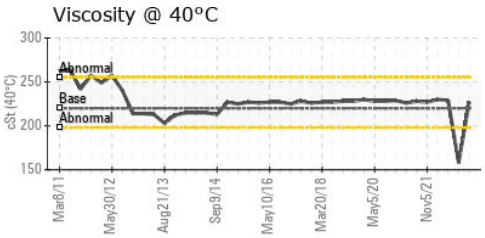
PQ



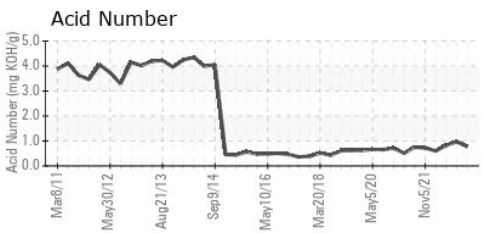
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0841273 **Received** : 31 Aug 2023
Lab Number : 02579783 **Diagnosed** : 01 Sep 2023
Unique Number : 5632843 **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.

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