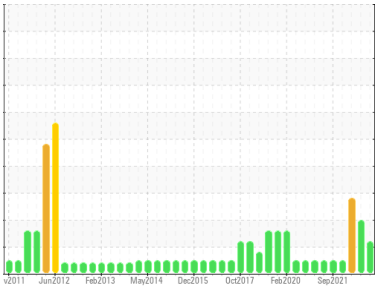
PROBLEM SUMMARY

Sample Rating Trend

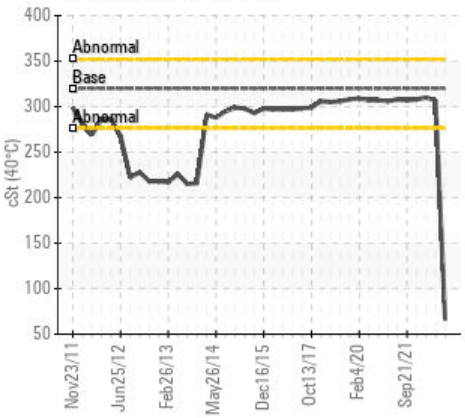


WEAR

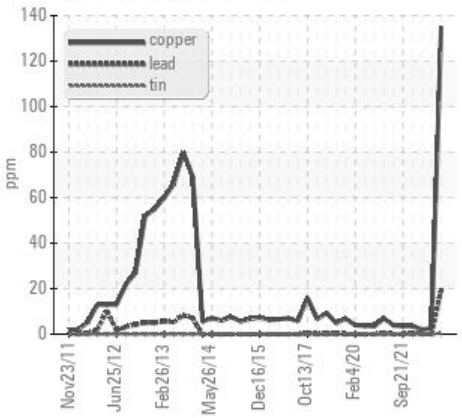
Area
TC01
Machine Id
TC01 10 Inch Top
Component
Gearbox
Fluid
SHELL OMALA S2 G 320 (--- LTR)

COMPONENT CONDITION SUMMARY

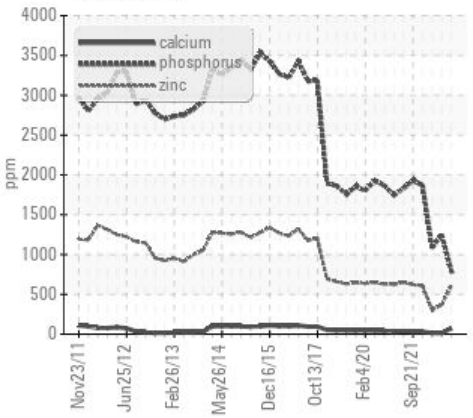
▲ Viscosity @ 40°C



▲ Non-ferrous Metals



Additives



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Copper	ppm	ASTM D5185(m)	>200	▲ **135**	3	2
Visc @ 40°C	cSt	ASTM D7279(m)	320	▲ **65.7**	307	310

Customer Id: GOONAP
Sample No.: WC22128053
Lab Number: 02553676
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
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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
Resample	---	---	?	We advise an early resample to confirm this situation.
Alert	---	---	?	NOTE: The current sample results do not match this units historical trend, indicating the sample may not be from this component/unit.

HISTORICAL DIAGNOSIS

05 Feb 2023 Diag: Kevin Marson

WEAR

We recommend that you drain the oil from the component if this has not already been done. 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.PQ levels are abnormal. The high ferrous density (PQ) index indicates that abnormal wear is occurring. 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

27 Oct 2022 Diag: Kevin Marson

WEAR

We recommend either performing an oil change or oil filtration. We cannot recommend specific action as we have limited information with regards to reservoir capacity and/or lubricant type. 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.PQ levels are abnormal. Iron ppm levels are noted. The high ferrous density (PQ) index indicates that abnormal wear is occurring. 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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report

05 Nov 2021 Diag: Kevin Marson

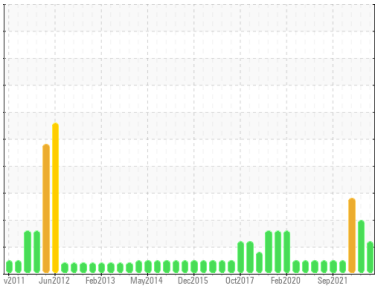
NORMAL

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



WEAR

Area
TC01
Machine Id
TC01 10 Inch Top
Component
Gearbox
Fluid
SHELL OMALA S2 G 320 (--- LTR)

DIAGNOSIS

Recommendation

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.

Wear

Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**WC22128053**	WC0754404	WC0664093
Sample Date		Client Info		**25 Apr 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**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
PQ		ASTM D8184*		**0**	▲ 249	▲ 230
Iron	ppm	ASTM D5185(m)	>200	**40**	122	▲ 82
Chromium	ppm	ASTM D5185(m)	>15	**<1**	2	1
Nickel	ppm	ASTM D5185(m)	>15	**2**	<1	0
Titanium	ppm	ASTM D5185(m)		**<1**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**9**	6	4
Lead	ppm	ASTM D5185(m)	>100	**19**	0	0
Copper	ppm	ASTM D5185(m)	>200	▲ **135**	3	2
Tin	ppm	ASTM D5185(m)	>25	**<1**	0	0
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**<1**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**<1**	0	0

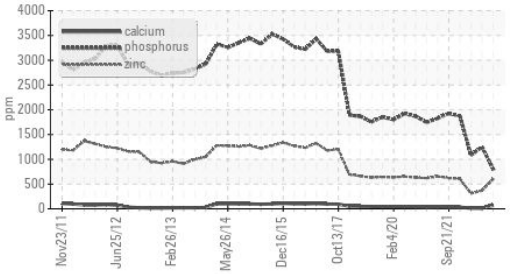
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	5.5	**<1**	<1	0
Barium	ppm	ASTM D5185(m)	0.4	**<1**	0	0
Molybdenum	ppm	ASTM D5185(m)	0.5	**0**	623	509
Manganese	ppm	ASTM D5185(m)		**<1**	1	<1
Magnesium	ppm	ASTM D5185(m)	23	**28**	<1	<1
Calcium	ppm	ASTM D5185(m)	13	**72**	13	14
Phosphorus	ppm	ASTM D5185(m)	450	**807**	1248	1086
Zinc	ppm	ASTM D5185(m)	9.9	**600**	365	307
Sulfur	ppm	ASTM D5185(m)	8181	**2434**	7303	7476
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>50	**20**	11	9
Sodium	ppm	ASTM D5185(m)		**3**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**0**	0	<1

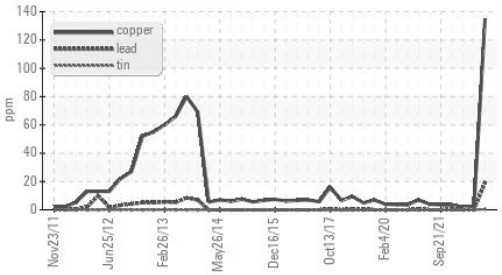
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974*		**1.01**	1.19	1.07

OIL ANALYSIS REPORT

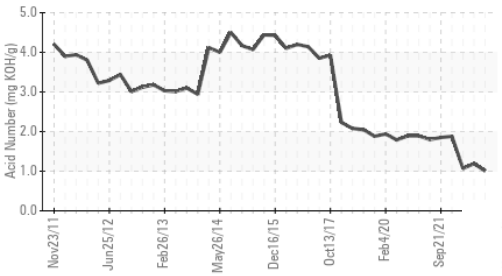
Additives



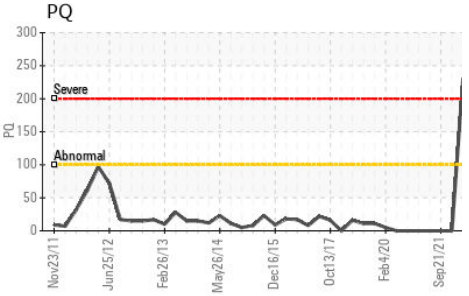
Non-ferrous Metals



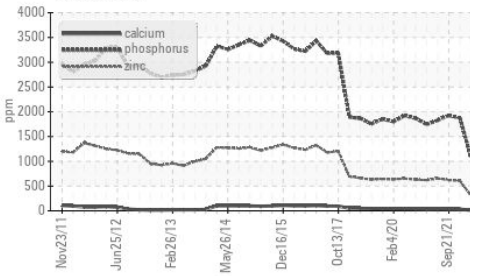
Acid Number



PQ

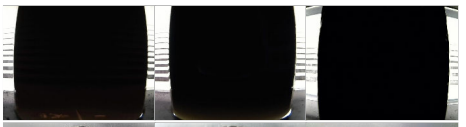


Additives



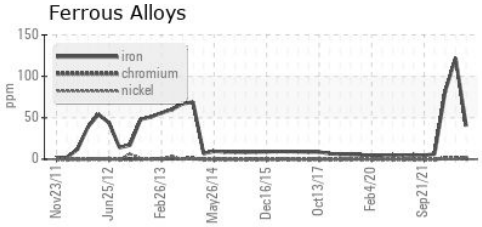
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	Visual*	NONE	**NONE**	LIGHT	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	320	▲ **65.7**	307	310

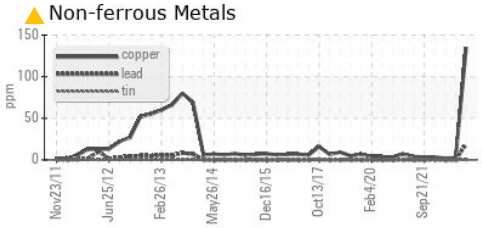
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
Color					
Bottom					

GRAPHS

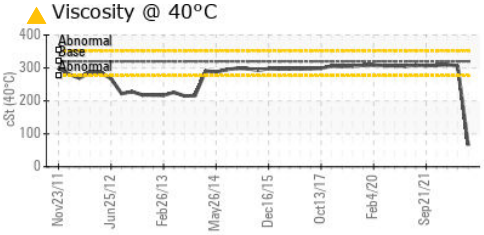
Ferrous Alloys



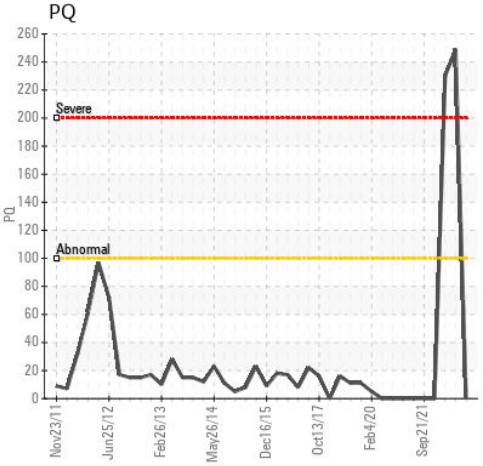
Non-ferrous Metals



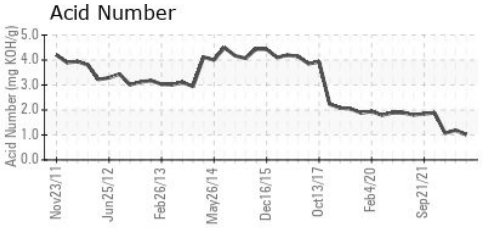
Viscosity @ 40°C



PQ



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC22128053 **Received** : 26 Apr 2023
Lab Number : 02553676 **Diagnosed** : 26 Apr 2023
Unique Number : 5566691 **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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