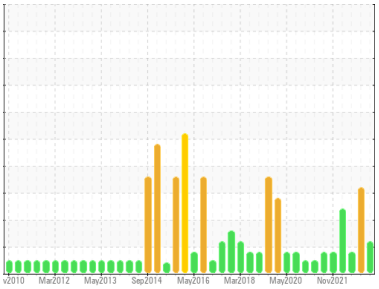
PROBLEM SUMMARY

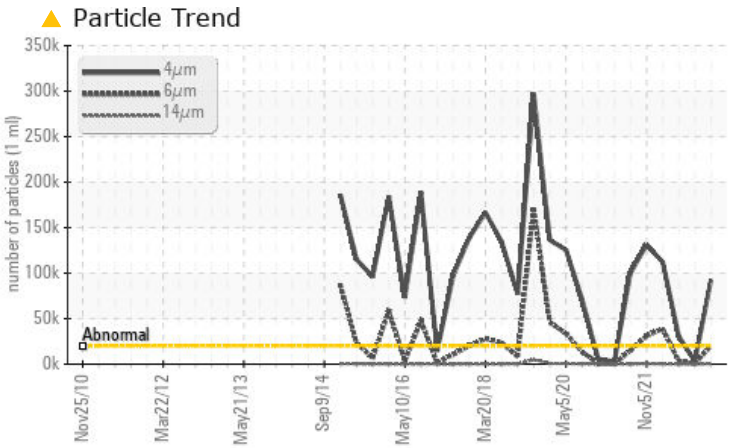
Sample Rating Trend



ISO

Area
Banbury 1
Machine Id
BB01 Mori Screw Drive
Component
Gearbox
Fluid
SHELL OMALA S2 G 220 (50 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	ABNORMAL	ATTENTION
Particles >4µm		ASTM D7647	>20000	▲ **92602**	2965	▲ 30746
Particles >6µm		ASTM D7647	>5000	▲ **20246**	746	3253
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/16**	19/17/12	▲ 22/19/13

Customer Id: GOONAP
Sample No.: WC0841262
Lab Number: 02579789
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
gloria.gonzalez@wearcheck.com

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

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. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 68 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

ISO

We recommend you service the filters on this component. 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 a light amount of silt (particulates < 14 microns in size) present 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

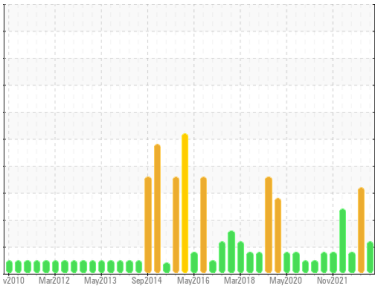
VISCOSITY

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high. 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 still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Banbury 1
Machine Id
BB01 Mori Screw Drive
Component
Gearbox
Fluid
SHELL OMALA S2 G 220 (50 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0841262**	WC22128036	WC0754387
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				**ABNORMAL**	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>200	**7**	37	14
Chromium	ppm	ASTM D5185(m)	>15	**0**	<1	0
Nickel	ppm	ASTM D5185(m)	>15	**<1**	2	0
Titanium	ppm	ASTM D5185(m)		**0**	<1	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**<1**	9	6
Lead	ppm	ASTM D5185(m)	>100	**0**	18	2
Copper	ppm	ASTM D5185(m)	>200	**<1**	▲ 133	8
Tin	ppm	ASTM D5185(m)	>25	**0**	<1	0
Antimony	ppm	ASTM D5185(m)	>5	**0**	<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	**<1**	<1	0
Barium	ppm	ASTM D5185(m)	0.0	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	0	**1**	0	684
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	**<1**	▲ 26	0
Calcium	ppm	ASTM D5185(m)	0	**1**	▲ 63	12
Phosphorus	ppm	ASTM D5185(m)	215	**330**	▲ 776	1352
Zinc	ppm	ASTM D5185(m)	0	**3**	▲ 575	298
Sulfur	ppm	ASTM D5185(m)	7039	**9430**	▲ 2312	8757
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

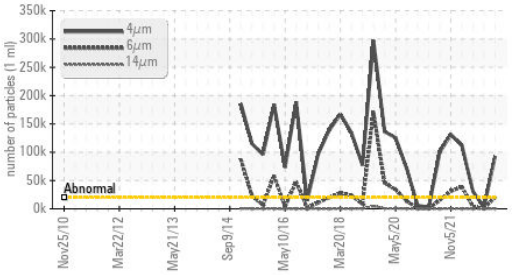
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	**4**	20	9
Sodium	ppm	ASTM D5185(m)		**0**	3	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **92602**	2965	▲ 30746
Particles >6µm		ASTM D7647	>5000	▲ **20246**	746	3253
Particles >14µm		ASTM D7647	>640	**575**	38	58
Particles >21µm		ASTM D7647	>160	**125**	8	10
Particles >38µm		ASTM D7647	>40	**13**	0	1
Particles >71µm		ASTM D7647	>10	**9**	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/22/16**	19/17/12	▲ 22/19/13

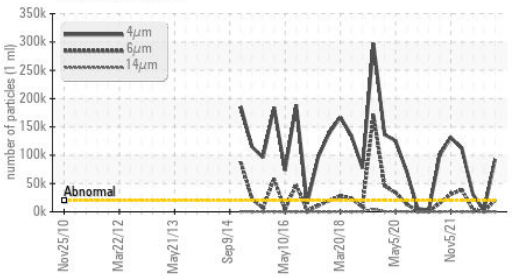
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.21**	1.05	1.59

OIL ANALYSIS REPORT

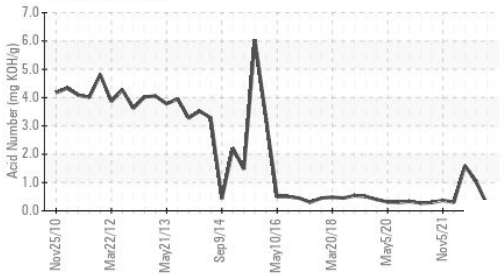
Particle Trend



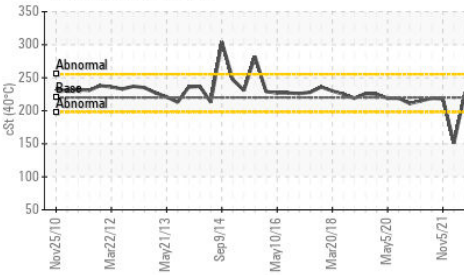
Particle Trend



Acid Number

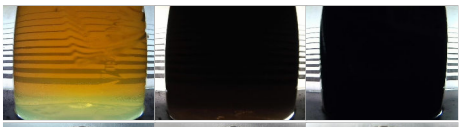


Viscosity @ 40°C



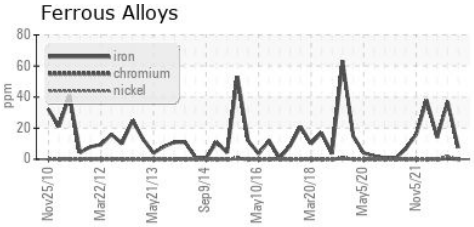
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	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)	220	**214**	▲ 65.2	227

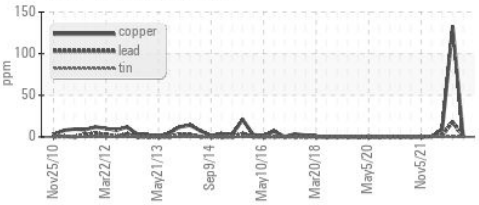
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

GRAPHS

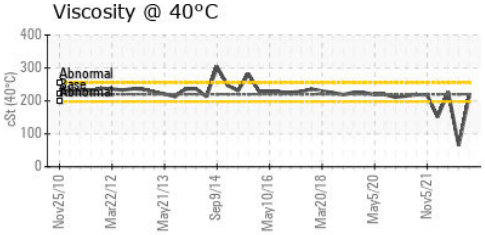
Ferrous Alloys



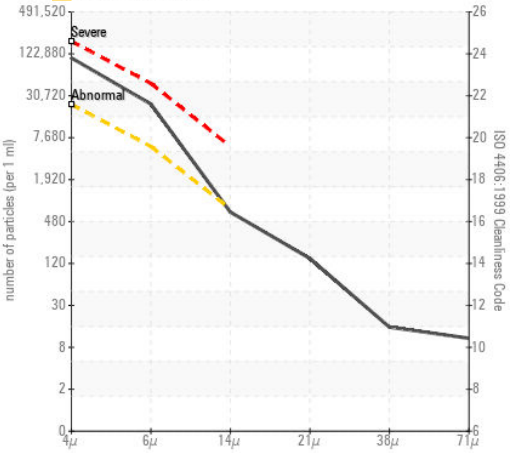
Non-ferrous Metals



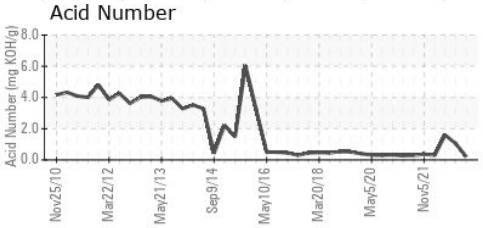
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0841262 **Received** : 31 Aug 2023
Lab Number : 02579789 **Diagnosed** : 01 Sep 2023
Unique Number : 5632849 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: PrtCount)

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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