



# PROBLEM SUMMARY

## Sample Rating Trend

ISO



Area

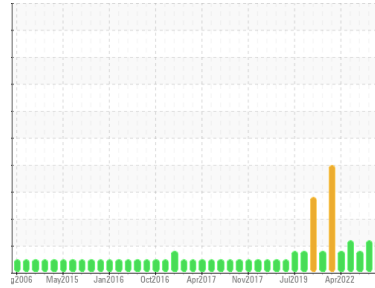
**9**  
Machine Id  
**09-0030-020-020 PRESS BOTTOM DRIVE (9MC1M1)**

Component

**9 Gearbox**

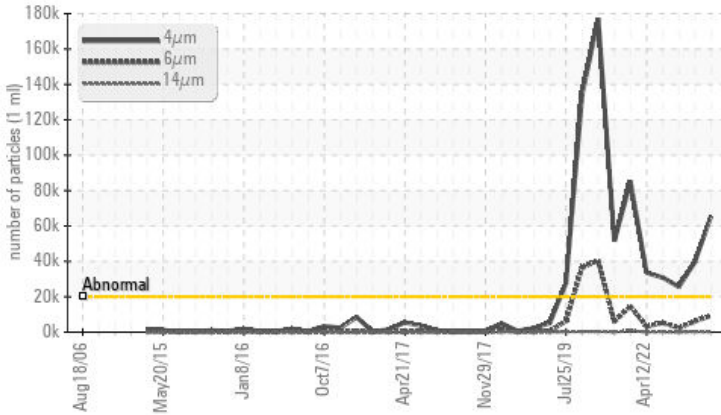
Fluid

**SHELL OMALA S4 GXV 320 (205 LTR)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION
Particles >4µm	ASTM D7647	>20000	▲ <b>65471</b>	▲ 39661	▲ 25608
Particles >6µm	ASTM D7647	>5000	▲ <b>9278</b>	▲ 6083	▲ 2429
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ <b>23/20/14</b>	▲ 22/20/15	▲ 22/18/13

Customer Id: MACPEM  
Sample No.: WC0857967  
Lab Number: 02585985  
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](mailto:wesd@wearcheck.ca)

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

### 09 Aug 2023 Diag: Kevin Marson

ISO



We recommend you service the filters on this component. 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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 07 Sep 2022 Diag: Wes Davis

ISO



We recommend you service the filters on this component. 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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



### 10 Aug 2022 Diag: Wes Davis

ISO



We recommend you service the filters on this component. 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. 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

ISO



Area

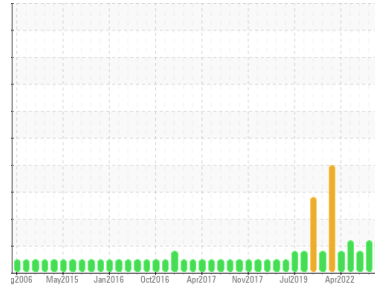
**9**  
Machine Id  
**09-0030-020-020 PRESS BOTTOM DRIVE (9MC1M1)**

Component

**9 Gearbox**

Fluid

**SHELL OMALA S4 GXV 320 (205 LTR)**



## 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		<b>WC0857967</b>	WC0841086	WC0740035
Sample Date	Client Info		<b>26 Sep 2023</b>	09 Aug 2023	07 Sep 2022
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ATTENTION	ATTENTION

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	<b>56</b>	56	44
Chromium	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	2	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>200	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>7</b>	8	7
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)		<b>7</b>	7	7
Phosphorus	ppm	ASTM D5185(m)		<b>222</b>	227	241
Zinc	ppm	ASTM D5185(m)		<b>10</b>	11	9
Sulfur	ppm	ASTM D5185(m)		<b>8802</b>	8176	8737
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>50	<b>3</b>	5	3
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1

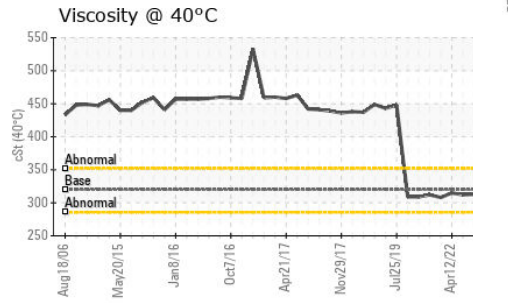
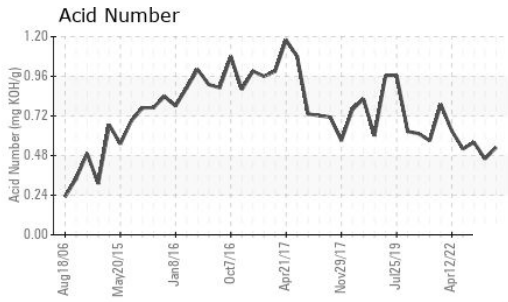
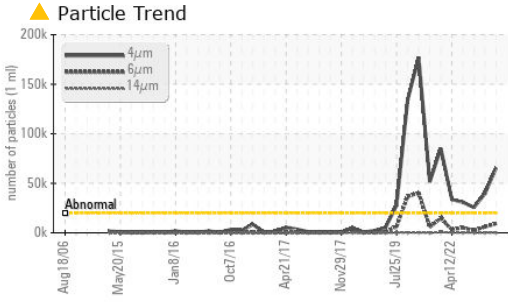
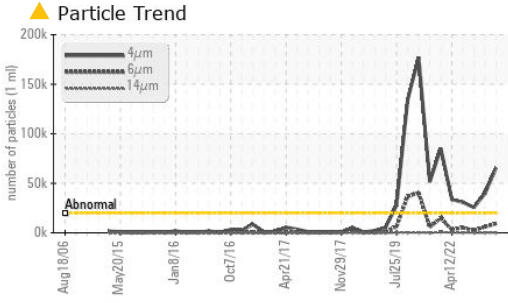
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 65471</b>	▲ 39661	▲ 25608
Particles >6µm	ASTM D7647	>5000	<b>▲ 9278</b>	▲ 6083	2429
Particles >14µm	ASTM D7647	>640	<b>104</b>	283	52
Particles >21µm	ASTM D7647	>160	<b>24</b>	66	12
Particles >38µm	ASTM D7647	>40	<b>1</b>	3	1
Particles >71µm	ASTM D7647	>10	<b>1</b>	1	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/20/14</b>	▲ 22/20/15	▲ 22/18/13

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.53</b>	0.46	0.56

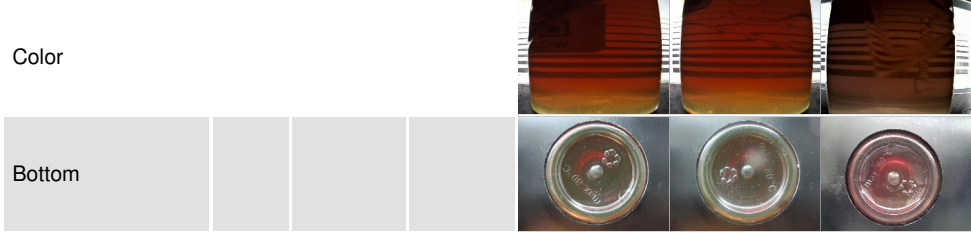
# OIL ANALYSIS REPORT



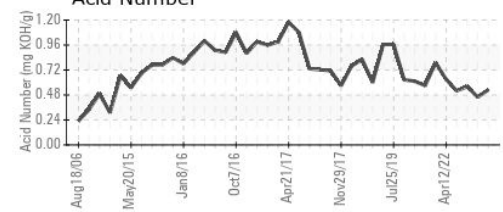
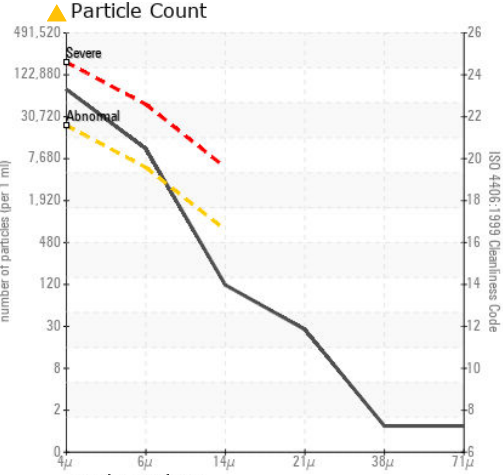
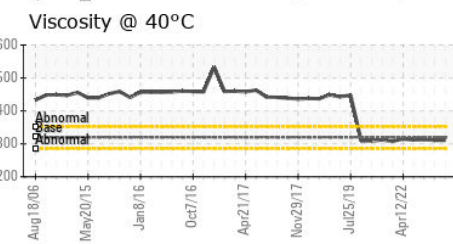
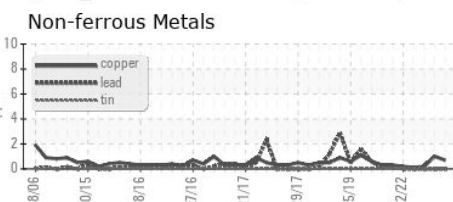
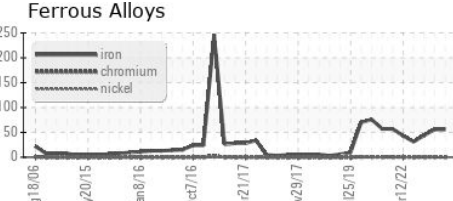
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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)	320	311	313

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.** : WC0857967 **Received** : 28 Sep 2023  
**Lab Number** : 02585985 **Diagnosed** : 02 Oct 2023  
**Unique Number** : 5655051 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Roseburg Pembroke MDF Inc.**  
 777 Fibreboard Drive  
 Pembroke, ON  
 CA K8A 6W5  
 Contact: Dan Havis  
 danielh@rfpco.com  
 T: (613)732-3939  
 F: (613)732-2869

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.